

# **Converging Technologies**

**Australasian Computer Music Association Conference 2003**

**Western Australian Academy of Performing Arts**

**at Edith Cowan University, Perth Australia**

**5th - 7th July 2003**

**proceedings**



**Converging Technologies**  
Australasian Computer Music Association Conference 2003  
incorporating the e\*mergence New Media Series and Soundwork Exhibition  
**Proceedings**

Proceedings of the Australasian Computer Music Association Conference 2003  
5<sup>th</sup> – 7<sup>th</sup> July 2003

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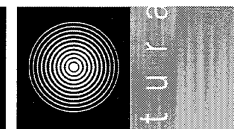
All refereed papers have been fully peer reviewed by at least two independent referees who are expert in the field. This satisfies Australian Commonwealth Government requirements for research data collection

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Cover Image of Miburist Danielle Micich by Tanja Visosevic from Lindsay Vickery's *your sky is filled with billboards of the sky*.

### Welcome from the Organising Committee

Welcome from the Organising Committee

It is with great pleasure that we welcome you to the Australasian Computer Music Conference 2003: Converging Technologies. The Western Australian Academy of Performing Arts at Edith Cowan University is proud to be the first Western Australian host of the ACMC. The Conference provides a great opportunity for practitioners of computer music and in particular members of the Australasian Computer Music Association, to share ideas, ferment debate and learn of the exciting new developments that have taken place in the region. The ACMC is the region's largest and most important showcase of state-of-the-art work, both artistic and scientific, related to music and technology and we would like to extend out thanks to all who have contributed to its success.

Recent times have seen a rapidly increasing convergence of technologies in the Electronic Arts. This year's conference will present research papers that focus on the convergence of audio, visual and mechanical technologies. The ACMC03 will seek to gauge the impact this crossing of media boundaries is having on the practice of electronic music. It also seeks to highlight developments in the field of live computer music including interaction, improvisation and non-linear works, with an emphasis on the impact this is having upon form, practice and presentation. Many of the papers presented at ACMC03 will focus on aspects of this theme. The MIT MediaLab's Gil Weinberg will give this year's keynote address. His research centers on designing musical networks for group collaboration with a special focus on devices and applications for novices and children. We are also very honoured to be able to present a talk and major work by master French Electro-Acoustic composer Bernard Parmegiani. This year the conference is also accompanied by the 'e\*mergence' new media series four concerts reflecting this year's Convergence theme. The series will culminate in a performance by Australia's first ensemble of interactive-electroacoustic instrument builders: Blisters (Jon Rose, Rainer Linz, Tom Fryer, Joanne Cannon and Stuart Favilla.). We hope that you will find the exciting combination of research and performance both engaging and thought provoking.

We wish to thank the authors for sharing their exciting work and thoughts, and also all delegates. It is because of you that we have this community, and it is through the efforts of the community that we are able to support each other, learn, and grow this field we all love.

There are many important acknowledgements for contributions that made this conference possible. Firstly we wish to thank The Western Australian Academy of Performing Arts and the School of Contemporary Arts at Edith Cowan University, the Tura Events Company and the Perth Institute for Contemporary Arts: this conference would not have been possible without their close cooperation and support. We would also like to thank corporate sponsors Music Park who provided audio production equipment and KRK who kindly supplied the surround sound set-up Alliance Française and Liquid Architecture who helped make M. Parmegiani's tour possible and the Australia Council who assisted in bringing Blisters to Western Australia. Finally, we extend our many thanks to this year's organizing Committee for their unflagging support for the project.

We hope you a rewarding time at ACMC 2003, and enjoy your stay in Western Australia.

Welcome!

Lindsay Vickery, for the ACMC 2003 Organising Committee  
Andrew Brown, Paul Doornbusch, Robert Sazdov and Tos Mahoney

### Table of Contents

#### Key-Note Address:

Author	Title	
Gil Weinberg	Interconnected Musical Networks – Bringing Expression and Thoughtfulness to Collaborative Group Playing	1

#### Interview

Author	Title	
Lindsay Vickery	Interview with Gil Weinberg	2

#### Fully-refereed papers:

Author	Title	
Roger Alsop	Compositional Processes in Developing Poly-Media Performance Works	5
Ross Bencina	PortAudio and Media Synchronisation - It's All in the Timing	13
Andrew Brown	Australasian Digital Instrument Building	21
Hannah Clemen	Interfaces for Public Use Interactive Installations: Some Design Concepts, Problems and Possible Solutions	27
Angelo Fraietta	Incremental sound installation development using the Smart Controller	36
David Hirst	Developing a cognitive framework for the interpretation of acousmatic music	43
Stuart James	Possibilities for Dynamical Wave Terrain Synthesis	58
Christine McCombe	An Opera of Clouds: Time and Space in mixed media performance	68
Peter McIlwain and Paul Doornbusch	Integrating Spatial Parameters in Musical Composition	75
Jonathan Mustard	Aesthetics in Sight-to-Sound Technology and Artwork: "Why do we do it?"	81
Lindsay Vickery	Non-linear structures for real-time interactive musical works	88
Donna Hewitt	EMIC - Compositional experiments and real-time mapping issues in performance	96

## Table of Contents:

### Non-refereed papers

Author	Title	
Cat Hope:	A Wardrobe of D.A.C.S- The Development of an Interactive Garment	105
Rene Wooller	* A Brief Analysis of Club Drum and Bass: Compositional Structures and Sonic Forms	110

### Artist talks and Studio Reports:

Author	Title	
Jon Burt and Katie Lavers	Artist Talk: Skadada: The creation and development of multi-artform performance	116
Hannah Clemen	Interactive Sound Installations Designed for Encouraging Meditative States	118
cAVity	Artist Talk: Skirting the square screen	122
Greg Jenkins	Artist Talk: Intimate Transactions	124

### Other Artist talk and Studio Report titles:

Author	Title
Steve Adam	Recent approaches to the Design of Interactive Music Systems for Performance and Installation
Anne Norman	BG1: The Bell Garden proto-type
Greg Jenkins	Studio report: QUT studio report - A room full of Emacs
Lindsay Vickery	Studio Report: ECU - Studio for Research in Performance Technology 02-03

## Key Note Address: Interconnected Musical Networks – Bringing Expression and Thoughtfulness to Collaborative Group Playing

Gil Weinberg

MIT Media Laboratory, E15-491, Cambridge, Massachusetts 02139-4309 USA  
email: gili@media.mit.edu

### Abstract

Music today is more ubiquitous, accessible, and democratized than ever. Thanks to technologies such as high-end home studios, audio compression, and digital distribution, music now surrounds us in everyday life - almost every piece of music is a few minutes of download away and almost any western musician, novice or expert, can compose, perform and distribute their music directly to their listeners from their home studios.

But at the same time these technologies lead to some concerning social effects on the culture of consuming and creating music. Although music is available for more people, in more locations, and for longer periods of time, most listeners experience it in an incidental, unengaged, or utilitarian manner. On the creation side, home studios promote privatized and isolated practice of music making where hardly any musical instruments or even musicians are needed, and where the value of live group interaction is marginal.

In my work I attempt to use technology to address these same concerning effects that it had created by developing tools and applications that would address two main challenges:

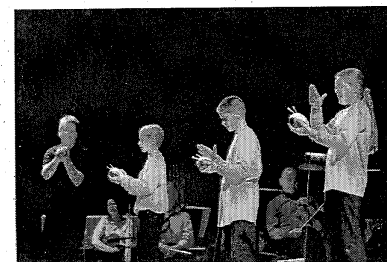


Figure 1. The Beatbugs concert in Dublin

1. Facilitating engaged and thoughtful as well as intuitive and expressive musical experiences for novices and children.

2. Enhancing the inherent social attributes of music making by connecting to and intensifying the roots of music as a collaborative group ritual.

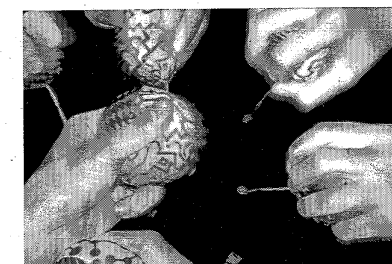


Figure 2. The Squeezables

My approach for addressing the first challenge is to study and model music cognition and education theories and to design algorithms that would bridge between the thoughtful and the expressive, allowing novices and children an access to meaningful and engaging musical experiences. In order to address the latter challenge I have decided to employ the digital network - a promising candidate for bringing a unique added value to the musical experience of collaborative group playing. I have chosen to address both challenges by embedding cognitive and educational concepts in newly designed interconnected instruments and applications, which led to the development of a number of such Interconnected Musical Networks (IMNs) - live performance systems that allow players to influence, share, and shape each other's music in real-time.

In my talk I discuss the concepts, motivations, and aesthetics behind IMNs, review a number of historical and technological landmarks that led the way to the development of the field, and present a set of networks that I have developed in an effort to turn IMNs into an expressive and intuitive art form which provide meaningful learning experiences, engaging collaborative interactions, and worthy music. In particular I will focus on the Beatbug Network which has been featured as part of the Toy Symphony in workshops and concerts in Europe and the US.

## ARTS



Catching the Bug: Gil Weinberg shows off his invention.

PICTURE: SHARON SMITH

## Making music? It's child's play

**T**HE invention of computer-generated music seemed to signal the end of music-making as a community activity — at least for fans of new technology.

Holed up in his home studio with his array of electronic equipment, the modern composer could twiddle his knobs and produce the entire sounds of an orchestra as a solo act.

Israeli-born Gil Weinberg is both a computer whizz and a musician-composer who dislikes the idea of computer-generated music taking away that traditional sense of music as a shared community activity.

His aim with his own ventures into computers and music is to put back this sense of community by creating the kind of instruments that anyone can use. As a result of extensive research at the Massachusetts Institute of Technology's Media Lab, a hothouse of invention, Weinberg has invented an instrument called the Beat Bug. It looks like a toy, and can in fact be used by children to create their own musical improvisations when each instrument is wired up to a central computer control system.

The Beat Bug and its implications for music-making is the subject of Weinberg's doctoral thesis, which he is completing.

But this week he is taking time out to demonstrate his Beat Bug to academics and computer-music buffs at the annual Australian Computer Music Conference in Perth.

To explain the Beat Bug to journalists, Weinberg simply whips out his laptop computer and plays a short video film on the screen of children performing his Toy Symphony. Up to eight children hold the Beat Bugs in their hands, slapping its oval surfaces to create the computer-driven percussive effects.

To vary the pitch of the sounds, the children simply bend two metal prongs like antennae. Everything is fed into the computer system where Weinberg's programmed symphony is enriched by the musical motifs of these players.

"The idea is to make the creation of music much simpler so that everyone can join in," says Weinberg. "It's very intuitive for children who can add their own improvisational sounds and even pass them on to the next person." Weinberg's invention obviously has implications for music education, but such "toys" are also taken seriously as part of the next wave of computer-generated music.

After completing his thesis, Weinberg will

take up a professorship in new media music at the University of Georgia in Atlanta next month. His work will involve further development of instruments such as the Beat Bug as he introduces students to the seemingly endless possibilities of bringing the latest in technology to bear on the art of creating music.

He will also be creating a new curriculum in electronic music as part of his university duties.

Born and raised near Tel Aviv, Weinberg began his musical career in traditional fashion by learning the piano — a strict regime which he admits he did not find very fulfilling as a child.

An interest in computers as a teenager led him to combine his love of music with new technology, and he set up his own company to create musical software for children.

His research resulted in a scholarship to MIT's Media Lab, where he has spent the past six years developing his ideas.

"The Media Lab is a centre of excellence for science, technology and creativity and a great place to further my work," he says.

"There's a whole field of interactive music out there waiting to happen."

RON BANKS

## Irish show reels in guest dancers

**T**HREE guest dancers from the internationally acclaimed Riverdance show will join Australian dancers for the new Irish dance production, Celtic Reign.

The show is based on the successful Riverdance formula and will feature reels, jigs and music from Ireland's rich cultural

heritage. Among the 15 dancers in the ensemble are Ireland's Bobby Fox, holder of four world Irish dance championships, as well as many other titles.

From the ranks of Australian dancers come Nicole Williams and Justin Ryan, who have been touring in the most recent production of Riverdance.

Both have won many championships and have performed with various Irish dance companies since 1998.

Bookings are open for Celtic Reign's five-performance season at His Majesty's Theatre. The first show is July 22.

■ **BUZZ** Dance Theatre's Rumpelstiltskin heads off on an extensive tour across Australia after its holiday season at the King Street Arts Centre ends.

The popular show will run at 11am and 1pm daily (Saturday 1pm only) until July 19 before the dancers take a short break. Rumpelstiltskin will then begin its heavy regional touring schedule in the South-West and Great Southern from July 28 to August 14 before heading to regional centres in Victoria and NSW.

The east coast tour will end in Lismore, and Buzz will return home via the Bunbury Entertainment Centre on September 23 and 24.

For WA regional dates phone Buzz on 9226 2322.



Celtic Reign . . . based on Riverdance.

## Magic of electronics

### Concert

Bernard Parmegiani  
WA Academy of Performing Arts music auditorium  
Review: Neville Cohn

**I**T WAS disconcerting to discover there were no musicians on stage for this concert offered as part of the Australian Computer Music Conference being held this week.

Instead, the audience faced a bank of seven speakers positioned on the wall of the auditorium. A similar number faced our backs, with a further two suspended on each side of the venue. All the sound-damping panels were fully opened.

Behind us was a table covered with electronic equipment to be used for playing the works of three composers, the most senior of whom was Bernard Parmegiani of France.

Now well into his 70s, Parmegiani has been a student and creator of electro-acoustic music for more than 40 years.

His De Natura Sonorum was the major offering of the evening, running for just under an hour. I had wondered whether such a long work would hold the attention. Would it be as pretentious and convoluted as some of the program notes, which incorporated phrases such as "variable continuousness" or "taster for an improved naturalness" and "successive inductions generating the artificial from the natural"?

My fears proved groundless. Parmegiani, like some electronics magicians, presented an endlessly fascinating series of variations.

For those concert-goers who like their music to have a clear-cut beginning, middle and ending, his work may, on first encounter, seem bewildering, even bizarre and off-putting. Much of it abounds in sounds that one would normally never encounter in the standard repertoire.

But for those who approach it with an open mind it can be immensely rewarding. In a sense, it is like peering into a big, slowly revolving kaleidoscope with glass shards that are ugly as well as pretty, every moment engaging the eye with a different collage of colours. So with Parmegiani's masterpiece; it entertains the ear if you allow it to.

For those who have experienced Bartok's so-called "night music", episodes of Parmegiani's piece will strike a chord (no pun intended) with its insect-like scurrings, feral snufflings and strange bird-like twitters and screeches. There are also awesome subterranean rumblings, outbursts that suggest huge explosions and violent metallic janglings.

There were two shorter works. Travail, by David Hirst, centres largely on the sounds of a coffee machine in action. Very much evident are the splutterings and hissings one associates with these caffeine dispensers, but a little of it goes a long way.

Also on the bill was Gordon Monro's Peace and Quiet, "a soundscape of Kangaroo Island, South Australia", surely a tongue-in-cheek offering which, with its twister-type howlings and whirring, and crashing assaults on the ear, brought irresistibly to mind the opening scene of the Wizard of Oz movie.

Without explanation, let alone apology, this concert started half an hour after the advertised time.

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# museum on move

New Welshpool facility has room to store 3 million artefacts

**arts**  
By RYAN STURMAN

**W**A Museum staff will soon move collections out of the Francis Street building as plans to build a new state-of-the-art museum progress. The State Government is

buying a 3.5ha property in Welshpool for \$7.3 million to store museum collections in better conditions and to provide interim accommodation for administrative and curatorial staff.

Culture and Arts Minister Sheila McHale said the purchase of the Welshpool property paved the way for the government to continue planning for a new museum facility, probably

within the Perth Cultural Centre. "The government is planning some dynamic changes to the city-scape as a result of the Southern Railway," she said. "Our vision for the arts in the City of Perth includes a vibrant 21st century museum." Ms McHale said the relocation to Welshpool, including preparation and cataloguing of the collections for moving, would take some months.

She said the Francis Street building had been unsuitable for storage of materials and accommodation of staff for years. "We had to act now to address the asbestos and health issues," Ms McHale said. The Welshpool facility had 16,500sqm of building space, including offices and storage areas. It would allow the museum to store about three million items.

## Music of the future features



Stuart Favilla with a light harp and Joanne Cannon playing the serpentine bassoon.

AUTOMATED violins, intelligent instruments and sensorlab guitars are part of a new breed of weird and futuristic musical inventions.

They will feature this month alongside a program of cutting-edge sound and computerised musical talent at the 2003 Australasian Computer Music Association Conference, being held in Perth for the first time. Curator Lindsay Vickery, of Highgate, said the conference theme was converging technologies.

The performance series will feature resident ensemble Blisters as well as WA's new media artists who are at the forefront of their art.

Blisters is Australia's first ensemble of interactive-electroacoustic instrument builders, featuring Jon Rose, Rainer Linz, Tom Fryer, Joanne Cannon and Stuart Favilla.

The event will be held at the Perth Institute for Contemporary Art (PICA), Northbridge, from today until July 12. Call PICA on 9227 6144.

## Short and sweet fest

LUNA Leederville will celebrate the 20th anniversary of one of Australia's most important national short-film festivals on July 13 and 14.

This year's St Kilda Film Festival features three programs of outstanding short films from Australian film-makers including the Palme d'Or winner for best short film, *Cracker Bag*, by Melbourne director Glen-dyn Ivin.

The first two programs, Hot Shorts One and Hot Shorts Two, showcase highlights of the cream of the current crop of short films screening in this year's National Short Film Competition.

A third program, Solid Gold Shorts, was compiled specifically for the 20th anniversary of the festival and highlights the event's pivotal role in the development of Australia's most celebrated film-makers.

The Solid Gold Shorts program features short films which originally screened in past St Kilda Film Festivals. They are by noted directors, including Jane Campion (*The Piano*), Emma-Kate Croghan (*Love & Other Catastrophes*), David Caesar (*Mullet, Dirty Deeds*) and P.J. Hogan (*Muriel's Wedding, My Best Friend's Wedding*).

Hot Shorts One will screen from 6pm - Turn Around, In Estate, Palme d'Or Winner *Cracker Bag*, *Black & White*, *Red All Over*, *Roundabout*, *I Love U* and *Buried*.

A double feature on July 14 includes Hot Shorts Two and Solid Gold Shorts which will screen from 7.30pm. They will show *Back Into The Night*, *Bing*, *The Cook*, *The Visitor*, and *Q*, followed by *Shopping town*, *Sex Rules*, *Sexy Girls*, *Sexy Appliances*, *Peel*, and *Getting Wet*.

Adults' tickets are \$13, concession \$8.50. Monday screenings adults \$9.50, concession \$8.

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# Macbeth

Directed by  
Maurice Ikin

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## ARTS

## Barking dogs give food for thought

PERTH writer David Ryding was on a plane winging his way to a new life in London when he was struck by the idea of creating a story about a German jackal forced to leave its home and seek refuge in a new land.

The idea grew into a fairytale but remained dormant for the next five years, until Ryding found himself back in Australia and writing about his own country's native dog.

Ryding works as a project coordinator for Barking Gecko's community arts program, sponsored by Sons of Gwalia in the Goldfields town of Leonora. He also writes and directs for the theatre company.

Back in the red dirt of the Australian Outback, Ryding's jackal soon transformed into a wolf. The wolf teamed up with a French poodle and a resident dingo and Hot Dogs was born.

"I realised that the jackal was a bit exotic so changed her into a wolf," Ryding says. "And I had the dingo from being out in Leonora. So I just had to get the poodle in because I needed a normal dog and he ended up stealing the show; he gets all the funny lines."

Blue the Dingo, Pierre the Poodle and Brigitte the Wolf are now being brought to life by actors Craig Williams, Damon Lockwood and Talei Howell-Price for the company's school holiday production. The play, targeted at 10-12-year-olds but suitable for all primary school aged



The dogs of peace: Hot Dogs players Talei Howell-Price, Damon Lockwood and Craig Williams.

Picture: KEN MALEY

children, has been touring to schools in the South-West and metropolitan area and will return to Barking Gecko Theatre Company's base at the Subiaco Theatre Centre from Saturday to July 19.

Ryding says Hot Dogs takes current issues and makes them more accessible for a younger audience.

The Tampa crisis and the debate that followed inspired Ryding to include the refugee issue in the show at a level children could understand.

"It is taking it down to an animal level and making it smaller," he said.

"I think it actually makes it easier for kids to get it. But it is big broad metaphors; nothing too obvious."

"On one level the show is meant to be a lot of fun; it is very cartoony and has a comic style."

"But there are issues like cooperation and multiculturalism and a reaction to the whole refugee issue. Like a lot of our plays it doesn't answer them; it is getting kids to question them."

Each dog has been kicked out of home and is competing for space in an inner-city alley when they realise that they can share

it between themselves. Ryding uses different theatre devices to allow each character to tell their story.

His poodle acts his tale through mime and rhyme, the wolf draws on puppetry techniques and the dingo stumbles through his lines as he learns to tell stories.

ALISON BENNETT

Hot Dogs opens at the Subiaco Theatre Centre on Saturday and runs until July 19, with performances at 11am and 2pm from Monday to Saturday. Tickets are available through BOCS.

## Macbeth falters in his ambition

### Theatre

Macbeth  
Rechabites Hall  
Review: Geoff Gibbs

THE distinguished actor, the late Sir John Gielgud, maintained that if one has a mediocre play then outstanding actors are needed to perform it successfully, but for a great play, even mediocre actors will do it justice.

Macbeth is a great play and director Marcelle Schmitz has a company of 14 performers who generally succeed in her lively production at the Rechabites Hall for Class Act Theatre.

She has assembled the essentials and the action begins well amid a thrilling soundscape from Gavin Tempny, beautifully underscored by moody lighting from Jeremy Smith which at times though is almost obliterated by an over-active smoke machine.

Schmitz sets her vision of Macbeth in a timeless, stark multi-level Jo Marsh set swathed in burlap and with her cast dressed in a grab bag of costumes of an indeterminate period.

The brave use of odd hubcaps for battle shields made some in the audience fearful of what they might discover when they returned to their vehicles parked in Northbridge.

The minor characters were strongly drawn with Dan Luxton shining as a noble Banquo and doubling up as a petulant Seaton.

Steve Turner delivered a well-paced and thoughtful performance as Malcolm and Steven Lee was a credible Duncan. But Kingsley Judd stole the acting honours with a splendidly charismatic interpretation of the porter, delighting the big school audience which gave this production attentive and generous support. However,



Macbeth cast: Fern Vallesi, Vivienne Glance, Elisia Doucas and Michael McCall.

Macbeth is primarily concerned with the disturbing problems of vaulting ambition and social issues as relevant today as to Shakespeare's audiences.

For the play to work and to communicate its ideas, we need to not only witness the unfolding of the story but come to an understanding of the forces that drive powerful people to their deeds.

What makes the play endure is that Shakespeare brilliantly provided the logic and rhetoric for Macbeth and his wife to hack their way to the most elevated office in Scotland.

Without that argument being clearly articulated by those characters, the play is but a series of events that an audience coldly observes without concern or engagement.

Michael McCall, as Macbeth, and Angelique Malcolm, as his wife,

are just not up to the task of articulating these concerns and carrying the show to its ultimate and essential dramatic heights.

For passion, they shout, for majesty, they lope, for sensuality, they paw each other with abject ugliness, and for the justification of their actions, they rant and babble.

Finally, McCall utters the famous lines that he is but a poor player strutting on this stage and, sadly, we have to agree with him.

But apart from the lacklustre performances of McCall and Malcolm, this is a pacy production boasting some animated and imaginative fight scenes and an effective coven of witches who perform Shakespeare's black incantations to the accompaniment of a distinctly odd palm court melody.

For me, however, the most telling line in this production was: "I pray you, remember the porter."

### IN BRIEF

UTE LEMPER, one of the world's finest cabaret artists, will perform at the Perth Concert Hall in September.

The German singer proved a sensation when she toured Australia's east coast in 2000, but this will be her first time in Perth.

Regarded as a superb interpreter of the songs of Weill and Brecht, Lemper will bring her style to music as varied as Nick Cave, Tom Waits and Joni Mitchell.

She will also be promoting her latest CD But One Day.

A modern-day torch singer who has been compared to Dietrich and Piaf, Lemper is, according to the critics, "both wildly glamorous and formidably talented".

An accomplished actress, author and painter, she is best known for her dazzling solo concert performances and leading roles in Broadway and West End musicals including Cats and Chicago.

Lemper performs in Perth on September 19. Bookings open at BOCS on Tuesday.

BLISTERS is Australia's first ensemble of interactive-electro-acoustic instrument builders, which is a mouthful in itself.

Its brief is to explore modern music-making through instrument development, interaction, group improvisation, production and performance.

The ensemble will be artists-in-residence at the Australasian Computer Music Conference's performance series, e'mergence, which will run at the Perth Institute of Contemporary Arts from July 9-12. Its members — Stuart Favilla, Joanne Cannon, Rainer Linz, Tom Fryer and Jon Rose — use an eclectic range of instruments linked to modern technology.

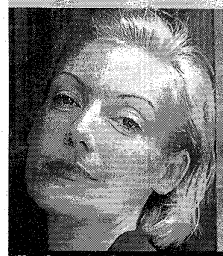
Blisters will perform as guest artists alongside local composers and musicians.

The e'mergence performances start on July 9 with works by Roger Alsop, Hannah Clemen, Stuart James, Greg Jenkins and Robert Griffin Morgan.

They will continue over the following three nights with further interactive and electro-acoustic music. A season ticket costs \$30, or individual sessions \$15; bookings at PICA on 9277 6144.

There will also be a series of concerts this Saturday, Sunday and Monday at 8pm at the WA Academy of Performing Arts as part of the conference.

Bookings from WAAPA box office on 9370 6636.



# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

## Installations@ECU

### Cat Hope: homefear

Location: ES 2 WA Academy of  
Performing Arts Building 1

July 5-7 9am-6pm

July 8-11 1pm -5pm

homefear is a series of 13 one minute  
audio visual works.

Here are plain domestic locations in  
unusual, unsettling frames - when we  
get too close, they become a place of  
confusion, dirt, remoteness and cold,  
colourless designs. The audio is one  
track altered in 13 different ways; the  
video is all from the same domestic  
location. The intention of homefear is  
that the sound and image will be  
inextricably linked in the creation of a meditative, disturbing simplicity.



### Cat Hope

Cat Hope is a classically trained flautist, sound artist, vocalist and video artist. She has directed numerous short music videos, created audiovisual installations and is part of the audiovisual duo cAVity with Anne Walton. Her installations have been shown in the USA, Europe and Australia wide. Cat Hope is also composer, performer, and the singer songwriter for Perth band Gata Negra. Her work has taken her on numerous overseas tours, most recently to perform at the 2002 International Symposium of Electronic Art in Nagoya, Japan and 15 different European cities. Her recordings are distributed and published worldwide, and she has written music and soundscapes for dance (Rakini, Link, Company Loaded) and theatre companies (Steamworks, Cutting Urge). She has been also commissioned to write music for film (winning the Pandora's Box Film Festival Best Score award in 2000) and pure music works. 2003 sees Homefear presented as part of Liquid Architecture 4 in Melbourne, residencies for cAVity at Clinches Mill, Geraldton and PICA, as well as a new record for Gata Negra.



### Stina Thomas, Chris McCormick and Eleanor Ingram: Circuits with the past

Location: Court Theatre Hallway WA Academy of  
Performing Arts Building 1

July 5-7 from 6pm - 8pm

'Circuits with the Past' is an installation which explores the  
circuits and links between memory, glitch music and the errors of  
time through technology. The installation incorporates interactive  
sound and video elements which represent memories and the  
failures of modern technology, and allows the audience to  
participate with the work.

### Stina Thomas

Stina Thomas is currently in her second year of Creative Technologies at WAAPA. Originally from Adelaide, she has previously studied classical Piano and Double Bass, along with textiles and print media at the School of Visual Arts (ECU). At the moment, Stina is working on collaborations with other students, and on her own trinket song collection - a series of short pieces using personal belongings from her tiny home. She wishes she still had her lego set.

### Eleanor Ingram

Ever since Eleanor was little she liked playing and making things. Since then not much has changed. She has done some art study, messed about with computers and got a degree. She now likes to make installations with some of her friends.

## Bernard Taylor and Petro Vouris: S HERE OMW IN CYBERIAN

Location: DS A WA Academy of Performing Arts Building 1

July 5-7 9am-6pm and July 8-11 1pm -5pm

With assistance by, and thanks to Jonathan Mustard.

The more information consumes us the less we consume it. Submerged in it like a veritable ocean we are left stranded, left more isolated and lonely than we did without it. When information is in such a mass quantity it is seen like white noise a dense representation of equal information. In it's mass it renders it's self meaningless and leaves us feeling isolated and more lonely than the recluse that sits isolated in his room as he surfs the net ICQing the void in a futile search for humanity.

## Hannah Clemen: IntraSpectral II – an Interactive Sound Installation

Location: ES 4 WA Academy of Performing Arts Building 1

July 5-7 9am-6pm and July 8-11 1pm -5pm

When we listen to sounds, we often forget that in fact we are listening to many sounds bound together in the form of a harmonic spectrum. It is the harmonic spectrum of a complex sound that gives it its own distinctive timbral colour and texture. IntraSpectral II is the second in a series of installations that allow you to hear these different components of a sound more clearly. When you sing, talk or shout into the microphone, a computer analyses the sound and separates out the first 7 harmonics. What you hear is not a sample of your voice, but a series of sine tone oscillators playing at the relative pitches and frequencies of these harmonics. The results are especially effective if you sing into it. If it doesn't respond to your voice at first, try singing a slightly stronger or maybe a longer tone.

You might also hear other qualities such as undulating waves in the sounds. These are triggered in different ways depending on how high or low, how long, or how loud the sound is that you have just made. Try some different ways of making sound and see what happens. The longer you spend with IntraSpectral II, the more you will get to know it. There are also 7 layers to the overall texture that you will hear, meaning that you can make 7 successive sounds and hear the harmonic spectra of them all playing together. Not only are you creating harmonies with the different sounds that you make, but with their harmonic spectra as well.

So come in and make some noise! IntraSpectral II is a musical instrument that responds to your voice, whether you sing, speak or shout. Feel free to explore the extent of your vocal expression, and listen to how the sounds we make consist of much more than what might be apparent when we hear them in our daily lives. We live in an ocean of sound.



### Hannah Clemen

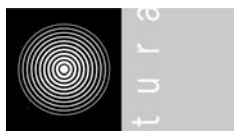
Hannah Completed a DPA in clarinet at WAAPA in 1996, and a BMus in composition at UWA in 2000. She is currently doing a Masters at WAAPA, in which she is researching the use of meditation as a creative tool in the realization of interactive sound installations. Hannah is a prolific composer, performer and sound artist, having been commissioned to create works for ensembles, visual artists, dancers and film-makers. In the past few years, Hannah's music has largely moved away from written chamber music, and is now focused mainly on live and studio produced electroacoustic music, group intuitive improvisation works and interactive installations.

*The Australian Computer Music Conference is an annual event that has been held in Australia or New Zealand in association with the Australasian Computer Music Association since 1993. The conference provides a forum for new compositions, information sharing, and research about music technology and computer music. Its membership includes composers, performers, educators, researchers and others with an interest in any aspect of the many forms of electronic music. This year's guests include: Bernard Parmegiani (France), Gil Weinberg (USA), Joseph Waters (USA) and Blisters (Australia).*

*All musical works have been fully peer reviewed by at least two independent referees who are expert in the field. This satisfies Australian Commonwealth Government requirements for research data collection*  
Concert Performance Committee: Tos Mahoney, Robert Sazdov, Hannah Clemen and Lindsay Vickery. Advisors: Andrew Brown, Paul Doornbusch and Sarah Miller.

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Conference Concerts: Concert I: 8pm Saturday 05 July WAAPA, Music Auditorium

# Etudes for Algorithms III

Bio

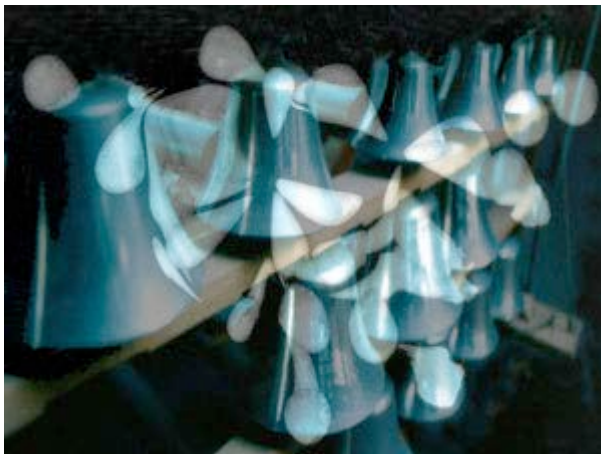
This is the second piece in a series of what I think of as URBAN PSYCHOSCAPES - more internal psychological states, a bifurcation from my central concern - PSYCHE OF PLACE - more about landscapes and spaces. The primary sound source is poet Jas Duke reading his own work. I think he is one of Australia's most important poets, having wit, incite, humour and social conscience, and, most importantly, a passion for the SOUND of words. Other prominent samples are from The Song Company and one of those famous European string quartets. Colin Bright 1999.

Contrary to Australia's other leading composers, Colin Bright is essentially self-taught. His early involvement in socio-political issues and his interest in Aboriginal music led to him to adopt Peter Sculthorpe as a mentor through the early seventies. Colin Bright has since received Composer Fellowships, International Fellowships and commissions from most of Australia's leading ensembles and his music has been performed and broadcast in 27 countries around the world. He is currently on a 2 year Composer Fellowship from the Music Board of the Australia Council, 2003-4.

The composer writes: 'The major influence on my musical thinking is PSYCHE OF PLACE (landscape, space, sun, etc.). There is nothing nationalistic in my music. It is about awareness of place - where you live and how you fit in.' His early work often includes didgeridoos (*Earth Spirit* 1982, *Fire on the Lake* 1989 etc) or concentrates on creating a true Australian sound (*RedEarth* 1985) culminating in the opera *The Sinking of the Rainbow Warrior* (1993/94). More recently, a number of different works have emerged in which the focus gradually shifts towards what the composer calls 'urban psycho-scapes'. These pieces seek to find the essence of a writer/poet (including sampling their voice) in order to open up meta-musical and theatrical dimensions (*War and Peace* 1994, *The Wild Boys* 1996, *Black Years - Red Years* 1997/98, *Ratsinkafka* 2000). His literal sources so far have included Jas Duke, Amanda Stewart and W. S. Burroughs. *The Sinking of the Rainbow Warrior* was performed as part of the Sydney Festival in 1997 and has since been released on CD (VAST028-2). *The Wild Boys* was awarded Best Composition of the Year at the Sounds Australian Awards in 1997 and was selected as the Australian entry for the 1997 Paris Rostrum. *Black Years - Red Years* won the NSW award for Best Composition at the 2000 Sounds Australian awards.

Roland Peelman 2001

[www.brightmusic.net](http://www.brightmusic.net)



### Brigid Burke: An Empty Bowl (2003)

This work utilises Percy Grainger's original percussion instruments (housed in the Grainger Museum); they were sampled and manipulated to create this work. **An Empty Bowl** has been developed into a musical context based on Grainger's philosophies of 'free music', improvisations, experimentation, individuality and forward thinking. Also gliding tones (inspired by Percy Grainger's Theremin) using all ranges from very low to high which glissandi unexpectedly. It also quotes in a slightly altered state Percy Grainger performing from his privately made piano roll 'Sketches for Sea Songs' one of the only free music piano rolls he made during his life time that exists today.

The sound source for **An Empty Bowl** as stated above are altered by filters. Also improvised clarinet (South American and bass), gong and metal are transformed by electronic devices in a free manner

throughout. The images are adapted from a series of pencil drawings I interpreted from working with dances in 1983, images of Grainger's staff bells and a early photograph of Percy Grainger housed in the Grainger Museum Melbourne where I have spent many hours.

### BRIGID BURKE

URL: The home page for this entity is located at <http://www.brigid.com.au>

Brigid is a audiovisual artist who will use any media to accommodate the space whether it is a performance or site specific. Her work is predominantly driven by the sound and is complemented by other media (visual and text) in many cases. Her aim is to create energy of movement from the various components.

She is primarily a composer, clarinet soloist, improviser, visual artist, and educator. She has performed extensively in solo and chamber recitals, most recently at many International Electronic Art Festivals. She has also performed in many solo and chamber performances locally, festivals and venues in Australia for over two decades.

Her visual art incorporates print making and computer graphics which she has received twelve art awards and exhibited through out Japan in the "Japanese International Hand Printed" & "Shhin Kohanga" competition since 1989. Many of art works have been developed into both sound works and audiovisual performance works incorporating live, prerecorded electronics, clarinets, video and slide projected compositions. "

As a freelance performer/composer/sound artist she is regularly broadcast on ABC FM including local & overseas radio and has recently completed a commission from the Australian Broadcasting Commission Listening Room "An Inner Thirst" broadcast early in 2003. Her most recent CD recordings are "Intersect", "Tri Duo", "Burke & Wilmot" and "Electronic Compositions 1997-2001", which have been reviewed and broadcast internationally. The Performing Arts Board of the Australia Council, ANAT, South Australian Govt., Community Arts Centers and Universities have also supported Brigid. She has a Master of Music in Composition from Melbourne University and is currently lecturing composition/ clarinet at Victoria University Melbourne.

### cAVity (Cat Hope and Ann Walton): ...fetish...

...fetish... uses the D.A.C.S (digital audio control skirt) as a station for sound and projection that transpose impressions from fetishised sites, surfaces and actions. The D.A.C.S were realised by cAVity as a hybrid screen and audio manipulation instrument for use in performance. cAVity is Anne Walton and Cat Hope. They first performed together at the International Symposium of Electronic Arts (ISEA) in Japan, 2002 and have collaborated on a number of platforms since their meeting. They are currently artists in residence at Greenough Hamlet, 450 kms North of Perth.

### cAVity

cAVity is and audio visual duo featuring artists Cat Hope and Anne Walton. The duo formed in 2002 for the Biennale of Electronic Arts Perth has since performed at Artrage 2002 and the International Symosium of Electronic Arts 2002 in Nagoya, Japan. They are interested in the relationship between sound, vision and performance, as well as experimenting with methods to present these art forms.

cAVity have are currently artists in residence at the Greenough Hamlet in regional WA, and will do another residency in Geraldton later this year. cAVity have are perhaps best known for their creation of the D.A.C.S (Digital Audio Control Skirt), an interactive music garment that is also a large, wearable video screen. In July and August 2003 they will be artists in residence at PICA, where they will continue experimenting with the D.A.C.S. Other projects planned for the near future include work with Blast Theory (UK) and a project at Dandaragan, 200 kms from Perth. More information is at <http://cavity.cjb.net>

### Data Terra (Audio / Visual Recording) Audio/Video Work by Daniel Heckenberg, Luke Collison & Nigel Kersten

The DVD is a live soundboard & video recording of a performance by Daniel Heckenberg, Luke Collison & Nigel Kersten on 7th December 2002 at INTERALIA / fs02: Data Terra (dLux Media|Arts <http://www.dlux.org.au/dataterra>).

Interpreting the theme of "data terra" through audio/visual performance, we chose to delve into the increasing role of advertising, "data" as a form of invasion of personal space "terra", through television, radio, email and other media advertising pervading most areas of habitation. Both audio and visual content for the work was entirely sourced from common advertising material, predominately through "sampling" the content of television advertisements. The sampled raw data was then prepared for use in a real time improvised audio/visual environment. Through "patches" programmed in graphical patching software: PD/GEM, Max/MSP and Reaktor, we used networking and Open Sound Control (OSC) to improvise the performance in multiple media.

### Luke Collison (luke@4trak.net)

Luke Collison has worked for a number of years within dance oriented electronic music performance. Recently he has been working predominately with "patching" based software environments and focusing on interaction between different products (e.g. MAX / Msp, Reaktor, PD) via networking. Luke is also acting as curator/co-ordinator of the "patching software" workshops and sessions at Newcastle Electrofringe.

### Daniel Heckenberg (daniel@bogusfront.org)

Interested in the emerging area of improvised video performance, Daniel is active in the development and performance use of software for this purpose – in particular PureData and its video framework GEM. He is also undertaking research in the area of gestural interfaces for rich performer-computer interaction.

### Nigel Kersten (nigel@4trak.net)

Nigel is interested in the creation of frameworks for collaborative audio and video works, particularly with respect to live performance and to explore issues of control within groups. He is working primarily in the area of sound design with audio patching software.

### Donna Hewitt: Dysphonia 3

Dysphonia is described as the 'neurological spasm of the vocal cords', a medical condition which has been the inspiration for a series of initial works with the eMic. The eMic (extended mic-stand interface controller) is a new interface for contemporary vocal performance with digital signal processing. The eMic design is based on my research into the gestural vocabulary of vocalists who use microphones and microphone stands which has shown that many vocal performers utilise the microphone and microphone stand as props during performance. The combination of structure, form and function of the microphone stand, along with the influence of cultural and social behaviours, have contributed to the development of a consistent vocabulary of gestures and habitual movements by performers who use a microphone stand. It is these gestures along with new gestures that the interface captures via various sensors, which are attached and built into the custom designed and built microphone stand.

Aurally, the composition will explore the nexus and border regions between the natural and modified voice, examining the possibility of generating „new and extended sounds% from the voice, and also expanding the range of expressive vocabulary of the voice in electronic space - aiming for a seamless synergy of voice/technology, as opposed to an oppositional relationship defined by human/machine boundaries. This brings into real-time and extends the rich historical tradition of vocal and electronic works. The synthesis and signal processing occurs via a PC Laptop using Miller Puckette,s PD and Ross Bencina,s Audio mulch.

### Donna Hewitt

Donna Hewitt is a composer/performer working with voice, environmental and computer processed sound. Much of her work involves re-processing microphone captured audio via various digital processes to produce complex textures. As a PhD scholarship student and lecturer in the Music Area at UWS, she is working with multi-channel audio and has completed a number of studio pieces in the Dolby 5.1 surround format. Recently she has been exploring realtime digital performance systems, custom interfaces in object/patcher environments and developing an alternate controller called the eMic (extended Mic-stand interface controller).

### Gordon Monro: Red Grains

"Red Grains" is in principle the record of an installation. The visuals came from a construction built from two laser pointers, some mirrors and a Lego Robotics kit. The movement of the Lego motors was influenced by two light dependent resistors (LDRs) mounted on the edge of the mirrors, so there was a feedback system.

The sound is the noise made by the Lego construction, processed by granular synthesis. The parameters for the granulation were obtained from five more LDRs on the mirrors, and two potentiometers driven by the Lego motors. In principle the granulation could have been performed in real time, though in fact it was not.

The sensor-to-MIDI conversion was handled by a MIDI controller made by Angelo Fraietta. The granular synthesis was carried out by a program written by the composer.

### GORDON MONRO

Gordon Monro is a Sydney-based composer specialising in electroacoustic music. His pieces have been performed in Australia, New Zealand, Europe, Asia and North America, and broadcast nationally on ABC radio. His website is at [www.gordonmonro.com](http://www.gordonmonro.com).

### Robert Griffin Morgan: Antipodes for 8 channel Sound Diffusion

*Antipodes-* 1. Any two places or regions that are on diametrically opposite sides of the earth.  
2. Something that is the exact opposite or contrary of another; an antipode. A direct or diametrical opposite

All musical information arises from the original source of a notated score utilising a miked Grand Piano. This score then instigated a synthesised background acousmatic layer, produced via sample manipulations and

real-time recordings, all compiled ready for playback. The structure of the work is preoccupied with the live interpretation of the score (and improvisations upon its material) and synthetic manipulations of the recorded performance via MAX/MSP as these new samples, stored in buffers, are mutated with sample excerpts from the acousmatic layer. The results are sounds fragmented around the eight surround channels all processed in an algorithmic MAX patch, mixing them with a pre-recorded acousmatic layer in a synthesised dialogue with the Pianist.

## Robert Griffin Morgan

Robert Griffin Morgan's compositional career begun after the completion of a Bachelor of Music degree when he won the A.B.C Young Composer's Award in 1995. Since then, much of Morgan's chamber music has been performed all over the country while orchestral commissions have instigated four works. To date, the West Australian Symphony Orchestra have performed three of Morgan's works, The Sydney Symphony one, the Tasmanian Symphony three and the State Orchestras of Sydney, Melbourne and Queensland giving multiple performances to one. Morgan has collaborated with many artists of contrasting vocations. In 1997, the West Australian Ballet commissioned the ballet score Orlando, while in 1999, The Australian Ballet secured a further commission, this time a full-length ballet. In 1998, Future Films commissioned a soundtrack for an art film by Glen Eaves, which was recorded by the West Australian Youth Orchestra and conducted by the composer. This score won the Young Composers Film Award in 1999. In 2000, he was chosen for the Peggy Glanville-Hicks Composers Fellowship and thus resided at the Peggy Glanville-Hicks Estate in Paddington, Sydney as resident composer. Morgan is currently commissioned by Ensemble Archangelo to produce a 30-minute work and is also on a Fulbright scholarship where he will leave for the USA next month to explore the various hybrid formats for electro-acoustic composition at Indiana University.

## Jonathan Mustard: Cyg.Net

"Cyg.Net" is a condensed version of Mustard's 25-minute improvisatory electronic work "Ahh ficus ficus!" that was composed for Chrissie Parrott's choreography in 2002. The sounds you hear in this piece are derived entirely from recordings the composer made of black swans on Lake Monger. The swan calls have been manipulated in hundreds of ways to create complex ever-evolving textures and sonorities, sometimes reminiscent of brass and woodwind instruments and sometimes quite percussive. The title comes from one sample that included a child screaming in the distance somewhat enigmatically "Ahh ficus ficus!". The video is of the 2002 performance at Dance House in Melbourne with Haley Schmidt as the solo dancer.

## Jonathan Mustard

Originally from Sydney, Mustard has been living and working in Perth since 1987 and has gained a reputation for innovative composition in this time. He graduated from N.S.W Conservatorium of Music in 1982 and is currently studying for a Master of Creative Arts at WAAPA. Mustard is well known in Perth new music circles as a composer of challenging and often beautifully haunting mixed media works for electronic and acoustic instruments. He has performed with Link Dance Company, Playback Theatre and Barking Gecko Theatre.

## Tissue Culture and Art/HEDKIKR: PigWings (2003)

PigWings [2003] In the Pig Wings project we have differentiated bone marrow stem cells to grow pig bone tissue in the shape of the three solutions for flight in vertebrates. The rhetoric surrounding the human genome project and xenotransplantation made us wonder if pigs would fly one day and if they will what shape their wings would take. Pig wings was shown earlier this year at the DeCorva Museum and Sculpture park in Boston TCA

## TISSUE CULTURE AND ART Project

TC&A (Oron Catts, Ionat Zurr, Guy Ben-Ary)

Based in Western Australia, the Tissue Culture and Art Project is an on-going artistic research and development project into the use of living tissue technologies as a medium for art practice. Their goal is to create a contestable vision of futuristic objects that are partly artificially constructed and partly grown/born. Since 1996, TC & A have been applying tissue-engineering principles for the purpose of artistic expression, growing tissue sculptures, 'semi-living' objects, by culturing cells on artificial scaffolds in bio-reactors. These semi-living objects consist of both synthetic materials and living biological matter from complex organisms. Ultimately, the goal of this work is to culture and sustain, for long periods, living objects of varying geometrical complexity and size. A unique set of issues and problems has arisen. Some of the problems concern the practicalities of the procedure itself, while the acquisition of living cells has focused attention on the ethical and social implications of creating 'semi-living objects'. The work of the group have been presented internationally in some of the most important new art events.

## HEDKIKR

Australian group HEDKIKR bring together a unique blend of maximalist composition, electronics, interactive video and intense improvisation. Since its formation in May 2002 the duo has played at The Knitting Factory (NYC), the DC International Dance+ Improv Festival, WhatIsMusic? Festival and MIUC (VIC), the Biennale of Electronic Art Perth, the Totally Huge Festival and Club Zoo (WA) and recently completed an eight-city tour of the USA. HEDKIKR have worked closely with the Tissue Culture and Art Group at SymbioticA in Perth. There is an undeniable connection between the organic development of the living cells that are the focus of TCA's work and the duo's musical ideas. HEDKIKR also regularly performs with dancer Danielle Micich using the MIBURI MIDI JUMP SUIT to manipulating interactive sound and video software designed by Vickery at Holland's STEIM studios.

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# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

Conference Concerts: Concert II: 8pm Sunday 06 July WAAPA, Music Auditorium

Works by:

## Hannah Clemen: Pillars of Sleep

I remember once having a dream – one of those dreams you have when you are only half asleep. I was in a clearing within an ancient forest. There was no moon, but the air was almost tinkling with clarity and the stars shone so brightly, I could see by them. Within the clearing was the ruin of a temple, an ancient Greek style temple with crumbling pillars, slowly being consumed by the advancing forest. Vines curled around the pillars' remains, and the moss shone on their surfaces. People had lived here long ago, but now only this relic remains, slowly being reclaimed by time and nature. The air was shimmering with a life that was inconceivably powerful and ancient. Alien yet familiar, like a force that is sometimes forgotten but is always there. Sleeping. The earth breathes beneath my feet.

This work originated from the sound I created for Sarah Douglas' 2002 installation *contrappunto v.* Constructed from only one sample, and a backdrop of cricket sounds, this work was conceived entirely within the Max/MSP programming environment, using an aleatoric set of processes designed to produce a unique piece each time the patch was run. The work being played tonight is one such version that was recorded, rather than a live run of the patch.

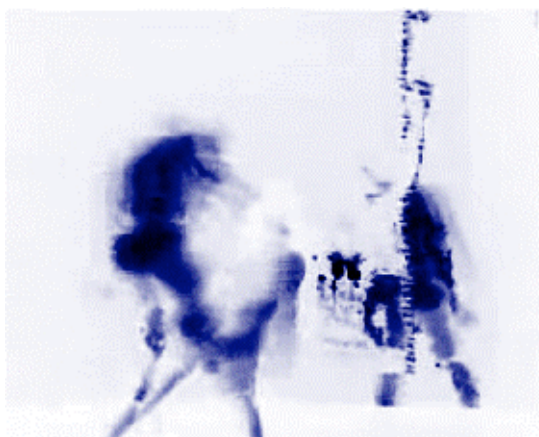
## Camilla Hannan: Broken/Mended/Fixed (2003) Duration: 15.06"

A three part quadraphonic work composed of location recordings made in 2002 and 2003.

The source recordings are primarily of drains under inner city Melbourne thoroughfares. These recordings were made using binaural headphone microphones. The results were then processed using digital sampling. My interest was in the metallic textures inherent in the recordings of drains. The way that the harshness of metal can be sonically manipulated into a new and gentler form. I was also interested in the recording of movement in nature and how that can be transposed and altered within the acoustic environment. Intrinsic to this investigation of surround sound composition is the idea of foreground and background. I am interested in how perceptions of distance alter our aural understanding of the world.

## Camilla Hannan

Camilla Hannan is a Melbourne based sound artist working primarily in gallery installation and surround sound composition. She is primarily interested in the psychological sonic narrative and the physicality of sound in space. She has exhibited at Gertrude Contemporary Art Spaces and Westspace Gallery in Melbourne. Her work was also featured in the 2002 Totally Huge Music Festival Perth and *Variable Resistance* Australian Sound Art at San Francisco MOMA. Her most recent solo exhibition was *Hedgeburner*, a surround sound installation involving 30 metres of synthetic grass at first site gallery Melbourne in July 2002. Camilla was co-director of *Liquid Architecture* National Festival of Sound Art in 2001 and 2002. She is a founding member of Melbourne's ((tRansMIT)) sound collective and works during the daylight hours as a staff producer for 3RRR FM.



## Stuart James and Petro Vouris: Friendly Firewire and Other Casualties of Infoland

*"The Americans are so dominant in military capacity, and that has just been shown to us in great detail. So what alternatives are available to people to make their point?... Terrorism is the new warfare of the 21st Century. For many there really is no alternative."* WA-Governor Lt. General John Sanderson.

*Through the strategic use of technology, and the way in which language and meaning is portrayed through political/corporate institutions via the media, power structures have begun to take advantage of these tools for the purposes of manipulating general public opinion. It is through these persuasive means that powers have had the ability to propagate*

*"truth" for political gain. Through the constant bombardment of language and meaning, public opinion is altered to reflect this social and cultural conditioning.*

*This project represents an autopsy on truth, and through the use of information (audio) we seek to reassess the power of language and truth. By using emerging technologies, an expressionistic response is revealed through a multi-faceted and evolving texture that is constructed through the modification and fragmentation of this audio. This is achieved using several software applications including Reaktor, Max/MSP, Audiosculpt, and Diphone. Source audio is manipulated using a number of processing alternatives that include sequenced granular resynthesis, sequenced loop-based processing, frequency domain processing, and audio segmentation-resynthesis.*

## Julian Knowles: **Sleeper II [2003]** for laptop and live performer

Paul Virilio in his book 'Speed and Politics' theorises the tendency for technology to collapse space, in that it allows those in possession of such to move with greater velocity (= speed). Technology allows us to move very quickly from one point to another either physically (in planes, cars and so on) or virtually (via telephony and the internet). I see this principle strongly in operation in the world of sound and music, in that cultural and physical spaces are collapsing via media technologies. Virilio's analysis is not entirely positive, in that he sees speed as a major contributor to global conflict (=politics). An attendant concept is that speed = power and it follows that those in possession of speed have the greater propensity to accumulate power. This to me is a somewhat intriguing musical concept, in that there is a massive (implied) velocity in bringing sounds into a collapsed contemporaneous space via digital processes. The corollary to this is that one needs to negotiate a complex network of cultural and compositional issues which present serious questions to the composer. *Sleeper II* is part of an ongoing investigation into these complex questions - sounds arrive from all corners of the physical, telephonic and virtual worlds to co-exist in the same temporal space, setting up surreal 'pansonic' sound worlds. The sound materials are drawn from field recordings in acoustically resonant spaces, amplified and acoustic instruments, radio signals, and sound synthesis procedures, working the boundaries between, and playing on the perceptual ambiguities of de-contextualised sound. Digital processing is used to reveal sonic substructures, to interfere with the link between sound and representation and/or to magnify micro-detail in the surface structure of sounds, inviting the listener to engage in a deeper form of listening.

## Julian Knowles

*"Julian Knowles, having a subdued, fun time behind his laptop, great to listen to. He takes us on a wild ride, from the gritty atmospheres of contemporary digital soundscapes...then sheets of aggressive, sparkling, scintillating neo-electro-acoustics, asymmetrically off-the-beat drum'n'bass, fluttering bass-drones, and more..." [Jonathan Marshall, 'What is Music?' live review, RealTime Magazine, 2002]*

Julian Knowles is a composer/performer and audio artist working with new and emerging technologies. His practice draws heavily on the transformation of location audio and is informed by film sound practices, electro-acoustic, acousmatic and concrete musics and contemporary popular music production techniques, resulting in a personalised sonic language which is exploratory, yet recognises its roots in historical traditions. It challenges the arbitrary distinctions between sound, noise and music and attempts to reveal the inherent musicality in so-called non-musical materials. Since the early 90s, Julian's work has made use of spatial audio systems and in the past 5 years has located itself within the 5.1 surround audio standard. In the early 90s, Julian joined the critically acclaimed experimental audio arts group *Social Interiors*. He continues to publish work under this name, both in collaboration with the other member and as a solo artist and this work receives frequent broadcasts and critical reviews internationally. Julian has undertaken a number of tours through the USA, the UK, Korea and Australasia and his music works is released internationally via Extreme Records. He is Head of School of Contemporary Arts at the University of Western Sydney.

## Robert Sazdov: Tribute – Vaska Ilieva [1924-2001]

Since the early 1950s until her recent death in 2001, Vaska Ilieva had been referred to as the 'Queen' of Macedonian traditional song. She has been awarded many honours from many European countries and undertaken tours throughout America, Europe and Australia. Her interpretation of a repertoire consisting of over 800 songs had earned her an enviable place as one of the most versatile and consequently popular Macedonian female artist. However, since the mid-1980s Vaska Ilieva had focused on interpreting what are known as 'patriotic' songs, which directly reflected the popular opinion and predicated the independence of the Republic of Macedonia.

On her tour to Australia in 1992, I undertook a cappella studio recordings of various traditional songs. One of those was *Sto mi omilelo* which is exclusively used in Tribute. The song is a *pecalbarska pesna* (economic migrant song), describes a man's 'longing', 'fondness', and 'memory' of his home town, Kumanovo, the 'maidens' in Kumanovo, and, the Kumanovo plains in northern Macedonia. This region of Macedonia was under terrorist attack and occupation in late – 2001, triggering a mobilisation of the Macedonian Army for the first time since 1943. Many Macedonians lost their lives in this insertion by fundamentalists who had western military intelligence, political and financial support. Many believe this was a strategic action for control over oil pipelines from the Middle East, which are proposed to run through the northern region of Macedonia.

Tribute is realised in an 'adaptation' of the proposed 10.2 surround sound format. The speakers are placed: front left, front centre, front right, side left, side right, rear left, rear centre, rear right, front left height, front right height, rear left height, rear right height, front sub, and, rear sub - there are a total of fourteen (14) speakers. Software programs MetaSynth and Reaktor were used for sound manipulation, and, Digital Performer for assembly and placement. 'Melodic picture templates' of traditional Macedonian songs and dances from the Kumanovo region were pixelated in MetaSynth's 'Image Synth'. Manipulations of *Sto mi omilelo* were used to create MetaSynth 'Instruments' and finally triggered by the 'Image Synth'. The exported 'samples' were then used to repeat the process.

The composition is viewed as a new adaptation of *Sto mi omilelo* interpreted by Vaska Ilieva, however, now 'performed' in a 10.2 'space' with new instruments expressing a contemporary 'voice' in the continuum of traditional Macedonian music. The song *Sto mi omilelo* is used as a metaphor for the 'longing' for peace and unity, the 'fondness' of traditional Macedonian values, as well as, the 'memory' of Vaska Ilieva. As long as there is a longing for 'Kumanovo' there will be hope for the future of Macedonia.

## Robert Sazdov

Robert Sazdov coordinates the Creative Technologies program at WAAPA. He has been composing multi-media and/or multi-channel neo-traditional Macedonian works since 1991. He is one of the coordinators of ACMC03.

## Bruce Schneider: It Has Come Full Circle

"It Has Come Full Circle" was composed using the Proteus EMU 2000. Static sustained notes have parameters such as tonal quality, presence, stereo image and sound shape altered by midi controller data shaped according to mathematical and geometric structures. The piece was composed between October and November 2002 and is included on the Discontact III CD compilation.

## Bruce Schneider

Bruce Schneider has a Diploma in Audio Engineering from SAE Brisbane, Diploma of Music Technology from QCM Brisbane and a B.Mus Sonology from Griffith University Brisbane. Bruce currently resides in Maitland New South Wales Australia and teaches sound recording, multitrack recording and midi at Newcastle TAFE, maintains a recording studio Avantgarde Audio Productions and is an active member of the Australasian Computer Music Association. Bruce has presented pieces at the 2000, 2001 and 2002 ACMC's and currently has a track on the Discontact III CD compiled by the Canadian Electroacoustic community.

## Simulus: Dissuasion (sic Despotism)

Dissuasion is an improvisation based on potent messages and phrases from times gone by. Subjective realities clash, combine and mingle in a vortex of semantic/signal processing. Fear, loathing, or a bright new future?

## Simulus: DRV

An improvisational exercise where each performer takes on the role of a traditional music functionary. Each laptop runs synthesis processes and gestural algorithms pertaining to their function. The three roles in this case are Drums, Rhythm and Voice.

## Simulus

Simulus is a collaborative project between composers Steve Adam, Ross Bencina and Tim Kreger. The ensemble combines studio aesthetics with live improvisation, performing on instruments created through a diverse range of electroacoustic software running on Macintosh and Windows computers.

## Joseph Waters: Kanashibari

Kanashibari is the Japanese term that describes an intense and often frightful experience, common in Japan, but rare in the west. It occurs upon waking from deep sleep. The sleeper opens eyes, looks around the room and tries to rise, only to discover with fright that she/he is unable to move — paralyzed —limbs and muscles frozen. They try to call out, but their larynx is also frozen. In terror they sense the presence of another being. In Japan discussion of Kanashibari is common, talk show hosts joke about it and self-help gurus prescribe tactics for dealing with the ghosts. Some say that, if one can overcome the fear, this state presents a powerful opportunity to communicate with the Kanashibari spirits.

The subject of this work is ghosts — the shadow personalities that inhabit our sleep — that we know little or nothing about — the sides of ourselves that may be completely obvious to others, but that we are almost completely oblivious to — the dark beings that live in the nooks and crannies of our gestures and populate our dreams. It is about the yearning to know these secret creatures that rustle the curtains just beyond reach. It is about pathos and vulnerability. It is about our terrible nocturnal loneliness and fear of the great darkness. November 2000

## Joseph Waters: Dream in Aqua & Scarlet

Dream in Aqua & Scarlet was commissioned by Alejandro Escuer, virtuoso Mexican flautist, and it appears on one of his CDs. It came about as result of my trip to Madison, WI in late April 2000, to make good on an old pledge from back in the late 1960s. As teenagers my friends and I had vowed that, no matter where we were and who we had become, we would return to Madison and meet at the quiet fresh water springs, in the heart of the University arboretum in the springtime at the turn of the millennium. I had not seen these people in 30 years and did not know what to expect.

I was so taken by the place and the memories that I insisted on getting up before dawn the next day and forced my childhood friend Bob Victor to drive me back to the springs so that I could record the spring as the sun rose and the piece flows from that.

The opening giant insect is actually a stereo recording of the creek flowing out from the spring, with stereo image reduced to the size of a large flies' wings, spun around in a circle at 100 time/second, and then "flown" around the sound stage with doppler to complete the transformation. The idea is that it flies around the room, and finally alights on the nose of the listener, at which time the propellor-wings slow down and expand, suddenly growing into the spring, to be quickly pushed aside by someone's hand, like a puddle of water on a countertop could be swept aside, and then the piece begins. I wrote a poem to go with it, which one never hears completely, and which mimics the water (and becomes convolved into the spring eventually). The notes all come from the birds, slowed down one or two octaves. The flute mimics these, eventually the insects begin to buzz/hum the same melodies, as did the water at one point, but I backed off on that finally. It sounds great in a big space, at healthy volume. In case you are interested I have attached the poem. FYI: the arboretum spring really is in the key of G.



### Visiting Artist: Joseph Waters (USA)

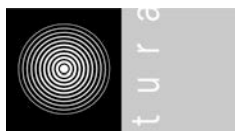
Joseph Waters is a member of the first generation of American classical composers who grew up playing in rock bands. Throughout his career he has been intrigued by the confluence and tensions which entangle and bind the music of Europe and Africa. Much of his work involves interactions between electronic and acoustic instruments. He has been involved in Inter-disciplinary and collaborative works on and off since the early 1980's. His works are performed widely, both in the U.S.A. and abroad. He has received numerous awards in composition, including National Endowment for the Arts/Rockefeller Foundation, Regional Arts and Culture Council (OR) and Pennsylvania Council on the Arts grants.

He is Artistic Director of NWEAMO (New West Electro Acoustic Music Organization). His day job is Assistant Professor of Music Composition and Director of Electro-Acoustic and Media Composition at San Diego State University. He studied composition at Yale University, the Universities of Oregon and Minnesota, and Stockholms Musikpedagogiska Institut. His primary teachers were Jacob Druckman, Bernard Rands, Roger Reynolds, Dominick Argento, Martin Bresnick, Robert Kyr and Jeffrey Stolet.

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# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

Conference Concerts: Concert III: 8pm Monday 07 July WAAPA, Music Auditorium

## Bernard Parmegiani: De Natura Sonorum (1975)

The instantaneousness of the ephemeral, the mobility and changableness of the repetitive: these are the themes that have helped to give birth to a dozen of my works, from **Violostries** (1963) to **Pour en finir avec le pouvoir d'Orphée** (1974).

With **De Natura Sonorum** I have begun a new period. After experimenting with the relation between the sound material and the form of its development, I have become interested in the writing of sounds - sounds whose ink, so to speak, is taken from material I try to combine and/or contrast in order to observe their nature.

Thus a dialectical emerges from the contrast between a living and natural sound (that remains diffuse in nature) and an artificial sound (a notion that suggests a "taster for an improved naturalness" as C. Rosset puts it).

This music, is intended to be as "general as possible", flows through a continuous metamorphosis, digging its own bed, thanks to successive inductions generating the artificial from the natural. Does listening to this constant transition from one state to another tell us anything about the nature of sound.

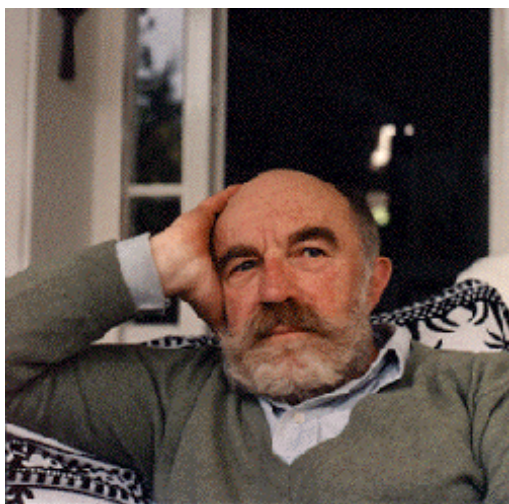
The first series is made up of five movements, most of which bring electronic and instrumental sounds, and less often concrete ones, into relation, generally in couples.

1. **Incidents/Resonances** brings sympathetic resonances of concrete sound events with processes that allow variable continuousness (prolongation of sound) of electronic sources into controlled play. The "incidents" are opposed to punctual "accidents" of the second movement.
2. **Accidentals/Harmonics** often very brief events of instrumental origin are brought in to modify the harmonic timbre from the continuum that they undercut or on which they are superposed. Elsewhere, the playing with pitches reduced to a minimum creates a zone of attention to other phenomena generally masked by the melodic form applied to the instrumental play.
3. **A Geological Sonority** resembles flying over a landscape in which the different "sound" levels will emerge on the surface one after the other. Electronic and instrumental sounds become confused in fusion, seen from such a height...
4. **Dynamic of the Resonance** is a microphonic exploration of a single sound body that is made to resonate by means of different types of percussion.
5. **Elastic Study** juxtaposes sounds coming from the different "playing" of elastic instrument skins (gold-beaters skin, zarb) and vibration strings and instrumental gestures analogous to this "playing" but created by the use of electronic generators of white noise.
6. **Timbre Conjunctions** last movement of this series uses the same material to apply rhythmic forms on a continuum of which the timbre is in continual variation.

The second series falls back on electronic and concrete means whilst the instrumental sources only appear in a fleeting way.

7. **Incidences/Pulsations** is a sort of recall of the first movement and leads very rapidly to:
8. **Ephemeral Nature** interplay of short-lived instrumental and electronic sounds rather more individualized by the form of the internal trajectory than by the material itself.
9. **Induced Matter** just as molecular effervescence creates transformations of state, it would appear that the different stages of the sound material's states here are products of each other, as if by inductions.
10. **Intermixed Wavelengths** the audible vibrations of pizz interfere with the waves that we imagine "visible" like water droplets on the surface of the same material.
11. **Full and Free** can be listened to as a study of the damped energies of bodies set into motion then rebounding. Such are the hollow "bubbles", and the points bringing into relationship the heaviness of some, and the very fine movements of others.
12. **Points versus Fields** here we have the idea of perspective of different sound themes that weave a sort

of field network, imprison the repeated punctuated elements of the foreground and absorb them progressively so as to give free reign to the fields and melodic sound that opens out.



## Visiting Artist Bernard Parmegiani: (FRANCE)

Parmegiani entered the Group for Musical Research (Groupe de Recherches Musicales) in 1959 where he studied electro-acoustic music under Pierre Schaeffer. Programmed in international festivals and concerts throughout the world, he has been awarded the Prix de l'Académie du Disque Français (1979); Prix de la SACEM (1981); Les Victoires de la Musique (1990); and the Prix «Magister» au Concours International de Bourges (1991). His work has expanded from the traditional world of Musique Concrète to include video art in works such as: **The Eye Listens** (1973), **Jeux d'artifices** (1979) and **The Transparent Screen** (1973). He also been involved in the nexus between improvisation techniques and electroacoustic music through work with various free jazz groups: J-L Chautemps, B Vitet, Michel Portal and Popular music groups such as The Third Ear Band and Air.

## David Hirst: Travail

Travail is from a suite called C'est la Vie which explores various aspects of life.

Pronunciation: tr&- 'vA(&), 'tra- "vAI

Function: noun

Etymology: Middle English, from Old French, from travailler to torture, labor, from (assumed) Vulgar Latin trepaliare to torture, from Late Latin trepalium instrument of torture, from Latin tripalis having three stakes, from *tri-* + *palus* stake

What a piece of work is man, homework, craftwork, working on the chain gang, worksong, work-in-progress, artwork, give it the works, is it working, work it, short-work...ah coffee break!  
*Travail* uses the sounds of a coffee machine as primary source material.

## David Hirst

David Hirst studied computer music at La Trobe University with Graham Hair and Jim Sosnin. He graduated with a Master of Arts by research and was awarded the David Myers University Medal as the most outstanding honours graduate. In 1997/98 he studied electroacoustic music composition under Professor Jonty Harrison at the University of Birmingham. David resides in Australia where he has worked as a Lecturer in Electronic Music and Composition at the University of Tasmania, as a Senior Lecturer in Contemporary Music Technology at La Trobe University, and as an Educational Designer at the University of Melbourne. His works have been performed at the International Computer Music Conference in the US, in Canada, the UK, the Netherlands, New Zealand, and nationally within Australia. David is on the Board of Directors of the Australian Music Centre and has served as President and Secretary of the Australasian Computer Music Association. He has been an international juror for the ICMC, the Canadian Electroacoustic Community, and ACMA. He founded *Mikropolyphonie*, the online journal of contemporary music, and his current research centres on the cognitive modeling of listening to acousmatic music.

## Gordon Monro: Peace and Quiet

"Peace and Quiet" is a soundscape of Kangaroo Island, South Australia. Kangaroo Island (south of Adelaide) is a quiet and peaceful place. The sounds in this piece were all recorded there at the end of August 2002, mostly in Flinders Chase National park. The sounds have not been processed, except for their positioning in the surround sound space.

## Gordon Monro

Gordon Monro is a Sydney-based composer specialising in electroacoustic music. His pieces have been performed in Australia, New Zealand, Europe, Asia and North America, and broadcast nationally on ABC radio. His website is at [www.gordonmonro.com](http://www.gordonmonro.com).

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# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

## on the Laptop

e\*mergence New Media Series: 8pm Wednesday 09 July PICA, Performance Space

Guest Artists from Blisters Tom Fryer and Jon Rose

### Jon Rose

[http://www.jonroseweb.com/a\\_jonrose\\_biography.html](http://www.jonroseweb.com/a_jonrose_biography.html)

In the last thirty years Jon Rose has been creating a unique body of work, almost everything imaginable on, with, and about the Violin. Working with many of the significant pioneers of new music, he has appeared on over 60 CDs and performs regularly in some 25 countries. He is a recognized innovator in interactive electronics and has built over 20 experimental instruments. He has recently realized the Ad Lib Project for the ABC and created works of bowed wire fences from remote Australia for this year's Melbourne Festival.

### Tom Fryer

Tom Fryer is undoubtedly Australia's most creative and adventurous guitarist. A pioneer performer of new tunings and intonations his work has led to the creation of his 19 tone Equal Temperament Guitar, the Just Intonation Guitar, and the Sensor-Enhanced MIDI Guitar. Tom was recently invited to perform at the 2001 Remori International Festival and has played with European luminaries Butch Morris and Maarten Altena. His work demonstrates a strong focus on performance technique. Eventually technique becomes an extension of the instrument itself.

### Roger Alsop: Shoes

#### Roger Alsop

Roger Alsop divides his time between teaching Sound Design in the School of Production at the Victorian College of the Arts and working as a sound designer and composer. His recent works include: **The Three Interiors of Lola Strong**, Downstairs 45, **Rice Paddies**, for the Melbourne International Festival of the Arts (MIFA 2001) and the Big West Festival; **Scenes of the Future from the Past**, NYID; **Springtime**, Griffin Theatre; **Paradise** and **Krapps Last Tape**, La Mama; **Remembrance of Things Past**, VCA School of Drama (MIFA 2002), and working in the creative development phase of **The Wall**. His recent musical and multimedia works include **How Can We**, Clubelectronische and **Improvisations**, Danceworks, for the Melbourne Fringe Festival 2003.

### Stuart James: ...the sun, the moon...

Composed using CSound, Blue, and OpenMusic; sound rendered in stereo using WinSound.

Of the few surviving ancient theoretical documents on music, it seems that many of the systems were based on the idea of dividing a string or a resonating tube at various points with respect to the fundamental harmonic relationship of the octave. With exception to the unison, this interval has the simplest of all harmonic ratios, being 2:1. However, it seems that for the ancient Chinese systems, and the origin of pentatonic scales, the respective importance of the octave is somewhat diminished. Alternatively, the fundamental relationship of the pure fifth (3:2) is used to construct harmonic (intervallic) relationships.

*...the sun, the moon...* uses the pure fifth as a primary fundamental (3:2), which is divided to form a pitch series formed through the symmetrical division of intervals by just intonation. Essentially this score varies between a textural, harmonic, and/or spectral structure. Most segments of the score have been realised within *OpenMusic* (Mac OS 9), which were then subsequently arranged within the *Blue* Csound compositional frontend tool (Windows XP). From here an audio render was obtained via the *WinSound* application (Windows XP).

### Greg Jenkins: man with a laptop

*"I am kino-eye, I am mechanical eye, I, a machine, show you the world as only I can see it"* said Dziga Vertov in reference to his 1929 masterpiece *Man With a Movie Camera*, in which he sought to create a new mode of cinematic expression. I seek to explore the sonic environment in much the same way Vertov sought to show the visual, to create perhaps a "loudspeaker-ear". In performance I use several laptop computers to manipulate, mix, distort and replay sounds.

#### greg jenkins <g2.jenkins@qut.edu.au>

greg holds the position of lecturer in music at the Queensland University of Technology, Creative Industries Faculty. His areas of speciality are music technology, sound composition and audio production. greg is also co-curator of *small black box* a monthly experimental music listening space held at the Institute of Modern Art, Brisbane. In his solo performances and in his collaborative projects (endoPHONIC, Hutt River Space Agency and The Arcimboldo Project) greg makes use of the micro gestures of software control to transform and synthesise sounds as real-time performance. he is also known as cactusman due to his penchant for using a cactus as an amplified acoustic instrument.

<http://endoPHONIC.net> <http://www.smallblackbox.com.au>

### Robert Griffin Morgan: Conspiracy Theories for 8 channel Sound Diffusion and Interactive electronics

A pre-recorded algorithmic acousmatic is used as a backdrop layer to further musical explorations through real-time sampling via MAX/MSP. This 8-channel acousmatic track follows a constant rhythmic perpetuation of a single sample that subtly evolves as each rhythmic/gestural stage grows out of the previous. Furthermore, the operator is required to manipulate further the gestural material from the soundtrack, which, in turn, is recorded for further processing real-time, all localized through the eight loudspeakers.

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# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

## with acoustic Instruments

e\*mergence New Media Series: 8pm Thursday 10 July PICA, Performance Space

Guest Artists for Blisters Stuart Favilla and Joanne Cannon

Stuart Favilla <http://home.mira.net/~favilla>

One of Australia's most innovative and creative musicians, Stuart Favilla specializes in synthesizer/computer music performance. He has been recognized internationally both for his talent and for the innovations he has contributed to this field. Stuart has toured with Joanne Cannon to Denmark and Hong Kong and has had recordings selected for release by the International Computer Music Association. Stuart works as a composer/producer and musical director for film, theatre and festivals and also as an educator lecturing at tertiary institutions around Australia. Stuart plays his renowned Light Harp that uses lasers and spotlights to trace virtual strings through space for performers to play.

Joanne Cannon <http://home.mira.net/~favilla>

Instrumentalist and composer Joanne Cannon is one of Australia's leading bassoonists and experimental musicians. Winner of the Daffodil National Arts award for her work for bassoon iSpeak!, Joanne's work is recognized for its combination of improvisation, experimental instruments and computer interaction. Joanne has also developed large-scale works for dancers and musicians using lasers and sculpture. Joanne began her career as an Orchestral musician but felt the bassoon was limited by the Orchestral repertoire. She began to explore the bassoon through improvisation; extending its capabilities through the performance of microtones and multi-phonics. Joanne plays a variety of double-reed instruments including her amplified electronic Leather Bassoon; which she has constructed in collaboration with Tasmanian Leather instrument builder Gary Greenwood.

## Stina Thomas and Nela Trifkovic: c Lash

**c lash** is a collaboration between masters composition student Nela Trifkovic and Stina Thomas currently in her second year of Creative Technologies.

*Nela Trifkovic:* The piece was originally written for the celeste and the harpsichord, and its title derives from the difference in tuning between these two instruments. I imagined that their individual tuning as well as each instrument's particular timbre would be creating certain clashes, some of which are (probably contrary to the usual connotations assigned to this word) very sensual and beautiful. The piece itself is made up of simple lilting harmonies of the lullaby-like celeste part are underpinned by the perpetually repeated notes and block chords on the harpsichord. Even the way in which the two parts are written suggests certain stylistic clashes: a lullaby on the celeste is played against a moto perpetuo pattern on the harpsichord... in conclusion I wish to add that I don't relish clashes and nor does Stina, we are simply aware that some clashes are beautiful, too beautiful to be avoided...

*Stina Thomas:* The performance of **c lash** involves a recording of the original, played by Nela and I, with additional improvisations on the celeste by Nela. I have digitally manipulated the source material, - extracting the mechanical and lyrical to side-chain with the exact - using Metasynth, Digital Performer and the MPC4000 as I will also do so live.

## Stina Thomas

Stina Thomas is currently in her second year of Creative Technologies at WAAPA. Originally from Adelaide, she has previously studied classical Piano and Double Bass, along with textiles and print media at the School of Visual Arts (ECU). At the moment, Stina is working on collaborations with other students, and on her own trinket song collection - a series of short pieces using personal belongings from her tiny home. She wishes she still had her lego set.

## Nela Trifkovic

Nela Trifkovic has explored the performance world in many different ways. Theatre, dance, music...these have all been her essentials. These days she focuses her strength on music writing, singing and playing keyboards. She has studied classical music at the children's conservatorium in Belgrade (Yugoslavia) and holds a Bachelor of Performing Arts degree from the WA Conservatorium where she studied piano and composition. She has made fairly regular appearances at the music festivals, has written music for theatre, dance, circus and film productions and performed as a classical pianist, singer and performance artist in various collaborations. Nela is currently in her final year of MACA at the WA Academy of Performing Arts and she hopes to continue giving her fellow collaborators and audiences as much fun and excitement as they have all given her for the past 15-16 years of her involvement in the arts.

## Stuart James: Transmorphology for Interactive performance between solo Alto Sax, live video capture, and real-time Waveshaping/Terrain-Synthesis

As a live interactive piece for solo performer, this work exploits possibilities in the relationships between performer, live video capture, and terrain synthesis audio modification by using some of the dynamical terrain synthesis waveshaping options through a process of audio signal embedding and polar/phase conversion. The performer will also have control over a variety of other parameters introduced with a series of recorder buffers that are used in addition to the live processed sound, allowing the performer to greatly modify pitch and loop-point parameters. Parameters are altered by the performer using various controllers in real-time. Following a reasonably aleatoric score, the performer is required to alter their own tone by changing the way they appear through a video capture device. The tone they produce from the acoustical wind instrument acts as another fundamental parameter in affecting how the resulting sound may be perceived.

## Robert Griffin Morgan: Syrinx in the Sun for 8 channel Sound Diffusion

A work with samples derived entirely from one pitch (G4) of my flute, the work is a gestural and rhythmic journey through shifting textures as each sound-source organically grows from the previous.

## Jonathan Mustard: Robosax IV: The Arsonist (2000)

This is the fourth piece (as you might have guessed) in a series of works for computer and performer exploring elements of control between performer and machine. They are the protagonists in the drama or perhaps the dilemma of 20th / 21st Century existence where the interaction of humans and machines (computers in particular) is ubiquitous and the question of which element in the equation has the control at any one time becomes ambiguous.

Robosax I explores a situation where the computer has the upper hand, controlling the instrumental sound and issuing orders to the performer to follow. Robosax III is almost it's polar opposite where the performer is in control of most of the musical parameters, but is faced with the arduous task of controlling not just his own instrument, but up to seven other virtual instruments at the same time.

In "The Arsonist" I try to solve some of the problems of Robosax III by having both parties relinquish total control for partial control. So the computer and the performer have their own set of orders and the sound the performer makes has a controlling influence on the machine, rather than the performer needing five hands and feet to play all parts effectively.

Each of the Robosax pieces get their subtitle from well-publicised tragedies such as Sydney's Strathfield Massacre, the Port Arthur Massacre (which occurred while I was writing Robosax III) and the more recent Queensland Backpacker Hostel fire. The sound-world that each of these pieces inhabits owes some debt to the madness, irrationality, consciousness of these events.

## Lindsay Vickery: Splice

Splice [2002] employs synchronized live sampling of the soloist to impose a formal structure on a live improvisation. It is an example of an encoded 'meta-music' - that is a compositional map that is without contents until a live performer adds them. The soloist's sounds may be stretched, altered in pitch, echoed or even sunk only to re-emerge later - techniques similar for example to those found in a conventional sonata composition - except that they occur in real-time. Splice sculpts all sounds into the same structure regardless of whether they are melodic, noise or even silence, so though it may sound different each time it's always the same shape. Splice was premiered at the Concert Studio of the Queensland University of Technology.

## Lindsay Vickery: Hey Jazz Fans! (2003)

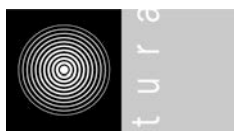
Charlie Parker probably looms large in the lives of most saxophone players. His short but massive contribution has been a frequent source of inspiration for my own works including **Savoy Trifle** (1988), **A-Synchronous Au-Privave** (1989), **Chase the Bird** (1991) and **entropology** (2002). **Hey Jazz Fans!** is the latest instalment. Many years ago a friend gave me a record called **Devil May Care** (or maybe I gave it to him and then 'borrowed' it back) of cheesy jazz songster and self-confessed hipster Bob Dorough. (Dorough's finest hour was singing the sycophantic **Nothing like you has ever been seen before** on Miles Davis' album **Sorcerer**.) One of the tracks on **Devil May Care** was a scat-style vocal version of Parker's **Yardbird Suite** featuring banal lyrics to every note of Parker's legendary solo. I guess I always dreamed of some terrible revenge that could be exacted for this desecration and through the wonders of modern technology I finally found a way. In **Hey Jazz Fans!** notes on the Alto Sax are mapped to bites of Dorough's Yardbird, allowing the live performer to trigger 30 or so chunks of Dorough at will. In effect just by playing the original Parker solo the performer can, like a devil who does care, rip Dorough's version apart phrase by phrase. And when you improvise... well it feels good. (LV)

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Alliance Française





# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

## Music and Video

e\*mergence New Media Series: 8pm : Friday 11 July PICA, Performance Space

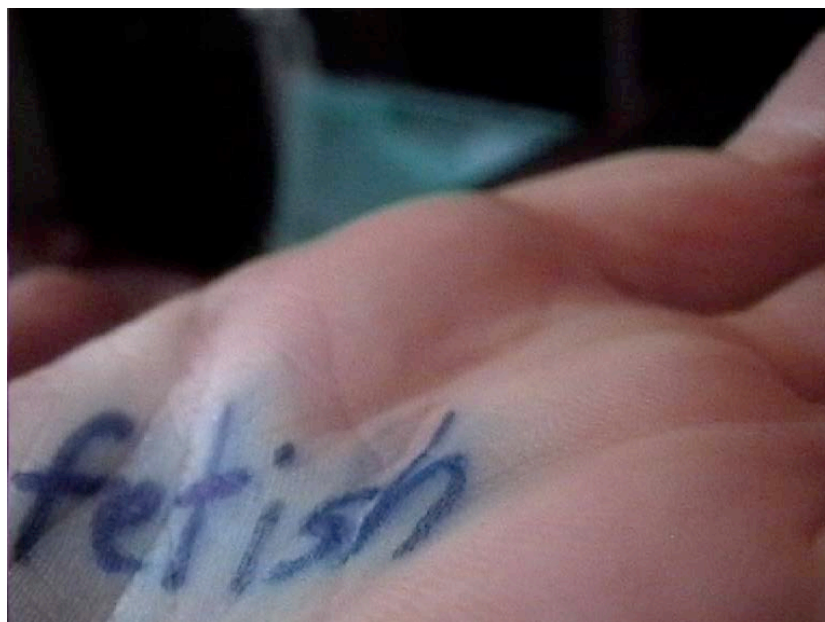
Guest Artists Blisters

**Robert Griffin Morgan: Le Produit de Chimique - for 8 channel Sound Diffusion and Interactive Electronics**

Chemical: 1. A substance with a distinct molecular composition that is produced by or used in a chemical process.  
2. Of or relating to the properties or actions of chemicals.

Taking the musical permeations implied by this word, the work is concerned with separate gestural sound-sources and how they merge, distort and mutate together to produce a soundscape evolving through its constituent parts.

This work also explores something I call *Rhythmic mutation* whereby a sound-source (rhythmic in content) gradually mutates into another sound-source with a contrasting rhythmic groove. A further step is taken at the beginning of this work by a lack of defined rhythmic impetus, which then makes way for defined rhythms that eventually change into new ones. Written into the algorithmic MAX patch are sections of time dedicated to real-time manipulations; synthesised samples extracted from the pre-recorded acousmatic file resulting in an improvisatory state directed by the operator.



### **Jonathan Mustard: Dismembered**

"Dismembered" is a dance and puppetry piece that plays with the notion that the human and the abstracted are potentially illusory standpoints. The body is deconstructed and dispersed into abstract components. A leg, a face, an arm, torso, hand etcΣ sometimes these might come together in the usual way ^ a whole body - and dance a human dance. At other times they fly off and become "source files" that are "dispersed through the generative syntax of software Σ" the focus shifting between the body and the constructed body, the body and the deconstructed body.

The presence or absence of up to four different

colours (associated with different body parts) re-maps the data flow from the visual input. Depending on which map is active, colours manipulate sounds in a primary, secondary or tertiary way similar to the way in which one might have an oscillator in a synthesiser being heard Æas is, or as a controller of another oscillator or as a controller of another effect (reverb for example).

In this system the performers have sixteen possible states to explore given all the permutations of presence or absence of four colours. The dancer and the puppeteers collaborate to invent their own narrative and movements within the general framework of the system and the themes of alienation and integration.

### **Rawbone (solo): Roly Skender presents a short mix of rhythmic audiovisuals**

Rawbone is an ongoing audiovisual performance project produced by West Australian video artist / musician Roly Skender. His work superbly combines music and video to create short-form rhythmic audiovisual pieces, each having its own theme. The pieces explore unconventional methods of narrative, making use of juxtaposition and repetition of familiar images to create a mind-bending journey through technology, sport, dance, humour and politics. Culture jammers sit up and take notice.

Live performances have proven to be an important way of connecting with Rawbone's audiences, who respond strongly as much to visual elements as to the music. Bringing video onto the stage with musicians is paving the way for a unique and powerful audiovisual art form, the rules of which are still being defined.

Contact: [info@rawbone.tv](mailto:info@rawbone.tv) WWW: [www.rawbone.tv](http://www.rawbone.tv)

**Lindsay Vickery: your sky is filled with billboards of the sky [2002]**

**your sky...** was developed for performance at the Real, Electronic and Virtual Instruments (REV) festival at the Brisbane Powerhouse in April 02. At the centre of the work is the MIBURI-clad performer interactively controlling all sound and video from her movements. (The MIBURI is a body-suit fitted with electronic sensors - like wearing an electronic keyboard.) The dancer's gestures are translated in real-time by the MIBURI's sensors to control all of the musical elements you hear and also 'mix' the video component including a 'live' camera feed of the performance itself. Thematically, **your sky...** is a sibling work to my song cycle **songs of [virtual] love+war** [1998]: perhaps a more abstract exploration of the same themes of identity in the context of a world increasingly comprised of simulated experiences. In this work the performer exists in a loop in which she is called upon to respond authentically to an environment almost entirely under her own control. This second version of the work was developed in collaboration with dancer Danielle Micich. LV

### Lindsay Vickery

Lindsay is active as a composer and performer across Europe, the USA and Asia. His music includes works for acoustic and electronic instruments in interactive-electronic, improvised or fully notated settings, ranging from solo pieces to opera. He is also a highly regarded performer on reed instruments and electronics, touring as a soloist and with ensembles throughout the world. He was a founding member of Magnetic Pig, SQUINT and HEDKIKR and has been a visiting artist at STEIM (NLD), HarvestWorks (NYC), the MATA festival (NYC), CEMI (University of Northern Texas), University of Illinois, Kyoto Seika University, San Diego State University, the DC International Dance and Improv Festival (DC) and Rensselaer Polytechnic Institute (NY). <http://lindsayvickery.com>

### Tanja Visosevic: dirty laundry

- i wash my machine. produced as an installation piece for the 'laundromat' exhibition (curated by alin huma, northbridge 2002). sound by petro vouris (featuring dj childisplay) and vision by tanya V (big thanks vassulini).

### Tanja Visosevic: mapping the living ghost: phase 002

- spectral interference. one of the video projection pieces as part of the dark science groups (deborah robertson, petro vouris and tanya V) performance for 'putting on an act' (PICA 2002). initially projected onto the dancers body.

### Tanja Visosevic: scene

- an artopsy. 'scene' is necrophilic debris left over from the 'peep-in death' exhibition (curated by maya catts and tanya V) ARTRAGE 2002. sounds were posthumously supplied by moongoat.

### Tanja Visosevic: cubicle

- partially or totally enclosed. fever supplied by dragana spasich, vibrations on the nerves of the inner ear by petro vouris and friends, scopic drive channeled through tanya V.

### Tanja Visosevic

as a child tanya V used to cover the windows with thick blankets to block out the kalgoorlie sun. she would watch super-8 movies that her father bought through mail order magazines. one of her favourites was 'butch cassidy and the sundance kid'. she became so mesmerised by their on-screen death, she decided to become a filmmaker.

among her other projects, tanya V is currently completing her phd in film theory at murdoch university and teaches video production at edith cowan university. she likes collaborating with local new music performers; forever in search for that voodoo moment between sound and image.

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# SOUNDS@ACMC03: Australasian Computer Music Conference 2003

Blisters: Ghost in the Museum

e\*mergence New Media Series: 8pm Saturday 12 July PICA, Performance Space

Blisters: Interactive-electroacoustic instruments performed by Jon Rose, Rainer Linz, Tom Fryer, Stuart Favilla and Joanne Cannon.

## Blisters: Ghost in the Museum

Blisters; Australia's premiere virtuoso ensemble of electronic instrument builders will present a bizarre and exciting performance of improvisations developed at the Grainger Museum late last year. Their performance continues the spirited pioneering work of Australia's famous composer Percy Grainger. Microtonal, free-tonal, random-round and Free music making will be presented within the context of the here and now while Grainger himself will be sitting in with the group.

Blisters: Beyond the cutting edge, the ridge of the blade and well away from the piercing point, The Blisters reside on the heel of Australian music. Rubbing up against global-economics and status enhancement, truly experimental music can find itself in contact with some interesting surfaces. Here is where the Blisters remain, creating some wonderfully bizarre music.

Blisters is Australia's first ensemble of interactive-electroacoustic instrument builders. The quintet boasts nearly 100 years worth of collective experience in this area and its members have been building instruments, composing and improvising since the 1970s. Automatic violins, thinking-instruments, modified instruments, Light Harps, Laser lyres, real air and sensorlab guitars, microtonal instruments, installations, Leather serpents and retro-radio style objects are just some of music making machines you would expect to experience at any given Blisters event.

A new Australian ensemble that builds music from the ground up achieving some startling and unique results. Music that fumes, erupts, explodes, departing and returning from weird angles, complex, droning, dodecaphonic, exquisite, raga, occasional banjos, country and western in 19 tones per octave; there is music wild, weird and wonderful.

Blisters is Jon Rose, Rainer Linz, Tom Fryer, Joanne Cannon and Stuart Favilla. The ensemble aims to explore 21st Century music making through instrument development, behavior, interaction, group-improvisation, production and performance.

## Artist Biographies:

### Jon Rose

[http://www.jonroseweb.com/a\\_jonrose\\_biography.html](http://www.jonroseweb.com/a_jonrose_biography.html)

In the last thirty years Jon Rose has been creating a unique body of work, almost everything imaginable on, with, and about the Violin. Working with many of the significant pioneers of new music, he has appeared on over 60 CDs and performs regularly in some 25 countries. He is a recognized innovator in interactive electronics and has built over 20 experimental instruments. He has recently realized the Ad Lib Project for the ABC and created works of bowed wire fences from remote Australia for this year's Melbourne Festival.



### Rainer Linz

Composer and sound artist Rainer Linz has a long involvement in radio, music theatre, instrumental and electronic music. His work includes an opera as well as numerous chamber and electronic pieces intended for concert performance. He is also an author and publisher. The Oxford Companion to Music in Australia (OUP 1999) notes "Linz's innovative and entrepreneurial work in Melbourne has been a significant factor in the city's prominence in experimental music."

His recent collaborative work includes the sound installation Barcode (Graz 1999), the interactive gallery installation infonoise (Belgrade 2001), and the live performance work Brainscore. Under the title New Listener; he has devised a series of computer programs where a music or sound composition can be adjusted to the listener's preference. He is a recipient of the Australia Council

New Media Arts Fellowship for 2002/3.

### Tom Fryer

Tom Fryer is undoubtedly Australia's most creative and adventurous guitarist. A pioneer performer of new tunings and intonations his work has led to the creation of his 19 tone Equal Temperament Guitar, the Just Intonation Guitar, and the Sensor-Enhanced MIDI Guitar. Tom was recently invited to perform at the 2001 Remori International Festival and has played with European luminaries Butch Morris and Maarten Altena. His work demonstrates a strong focus on performance technique. Eventually technique becomes an extension of the instrument itself.





## Stuart Favilla

<http://home.mira.net/~favilla>

One of Australia's most innovative and creative musicians, Stuart Favilla specializes in synthesizer/computer music performance. He has been recognized internationally both for his talent and for the innovations he has contributed to this field. Stuart has toured with Joanne Cannon to Denmark and Hong Kong and has had recordings selected for release by the International Computer Music Association. Stuart works as a composer/producer and musical director for film, theatre and festivals and also as an educator lecturing at tertiary institutions around Australia. Stuart plays his renowned Light Harp that uses lasers and spotlights to trace virtual strings through space for performers to play.

## Joanne Cannon

<http://home.mira.net/~favilla>

Instrumentalist and composer Joanne Cannon is one of Australia's leading bassoonists and experimental musicians. Winner of the Daffodil National Arts award for her work for bassoon iSpeak!, Joanne's work is recognized for its combination of improvisation, experimental instruments and computer interaction. Joanne has also developed large-scale works for dancers and musicians using lasers and sculpture. Joanne began her career as an Orchestral musician but felt the bassoon was limited by the Orchestral repertoire. She began to explore the bassoon through improvisation; extending its capabilities through the performance of microtones and multi-phonics. Joanne plays a variety of double-reed instruments including her amplified electronic Leather Bassoon; which she has constructed in collaboration with Tasmanian Leather instrument builder Gary Greenwood.

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# the australian computer music conference

## e'mergence performance series

### wed 9th 8pm with the laptop

Live rendered computer compositions

Guest Artists Tom Fryer and Jon Rose and works by Roger Alsop, Hannah Clemen, Stuart James, Greg Jenkins and Robert Griffin Morgan

### thurs 10th 8pm with Acoustic Instrument(s)

Works involving acoustic instruments and electronics

Guest Artists Stuart Favilla and Joanne Cannon and works by Stuart James, Robert Griffin Morgan, Jonathan Mustard and Lindsay Vickery.

### fri 11th 8pm Music and Video

Guest Artists Blisters and works by Robert Griffin Morgan, Jonathan Mustard, Rawbone, Christina Thomas, Lindsay Vickery, Tanja Visosevic and Cat Hope.

### sat 12th 8pm Blisters

Blisters: Interactive-electroacoustic instrument performed by Jon Rose, Rainer Linz, Tom Fryer, Stuart Favilla and Joanne Cannon.

### Ticketing

All concerts \$15/\$10 conc, Tura, PICA. Season Ticket \$30. Performance Bookings through PICA 9227 6339.

## technology workshops

### Andrew Brown: Jmusic Workshops

Tuesday July 8, 2.00-4.00 pm

Wednesday July 9, 2.00-4.00 pm

WAAPA@ECU MIDI Lab 1.220a

jMusic is a project designed to provide composers and software developers with a library of compositional and audio processing tools. It provides a solid framework for computer-assisted composition in Java, and is also used for generative music, instrument building, interactive performance, and music analysis.

### Gil Wfenberg: HyperScore

Thursday July 10 2.00-4.00 pm

Friday July 11 2.00-4.00 pm

WAAPA@ECU PC Lab 16.236

Hyperscore is an application introducing children and non-musicians to musical composition and creativity in an intuitive and dynamic way. The Hyperscore system automatically realizes a full composition from a graphical representation, allowing individuals with no musical training to create professional pieces.

\$10/\$5 concession and PICA members. APMC delegates free. Bookings at Tura 9380 6996.

## Ensemble-in-Residence: Blisters (AUS)

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LightHarp, giant Laser-lyres, real air and sensorlab guitars, microtonal instruments, installations, leather serpents and retro-radio style objects are just some of music making machines you would expect to experience at any given Blisters event. Blisters is Jon Rose, Rainer Linz, Tom Fryer, Joanne Cannon and Stuart Favilla. The ensemble aims to explore 21st Century music-making through instrument development, behaviour, interaction, group-improvisation, production and performance.

## WAAPA@ECU

The Western Australian Academy of Performing Arts at Edith Cowan has a strong commitment to the advancement of the Arts through technology. In 2001 it commenced a Bachelor degree in Creative Technologies and it boasts a strong range Post-Graduate research in Performance and Technology related fields.

## PICA

The Perth Institute of Contemporary Arts  
Perth Cultural Centre, Northbridge [www.pica.org.au](http://www.pica.org.au) 9227 6144

## Tura

The New Music Resource and Promotion Centre for Western Australia [www.tura.com.au](http://www.tura.com.au) 9380 6996 info@tura.com.au

Tura's annual program is made possible by the support of ArtsWA in association with the Lotteries Commission and the Australia Council.

## The 2003 Australian Computer Music Conference

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WAAPA@ECU

WESTERN AUSTRALIAN ACADEMY OF PERFORMING ARTS





tura events co  
in association  
with waapa@ecu  
and pica  
present

# acmc03 e\*mergence performance series

# computer music

wed 9 –  
sat 12 july  
pica

e\*mergence  
performance series  
as part of The 2003  
Australian Computer  
Music Conference

all performances at  
PICA Perth Cultural  
Centre Northbridge

