

**ASA2008 SCIENTIFIC PROGRAM**  
**(Tattersall Lecture Theatre and MCS Building, UWA)**

**Monday 7<sup>th</sup> July 2008**

<b>09:00</b>	<b>Welcoming remarks</b>	
	<ul style="list-style-type: none"> <li>• Professor Warrick Couch, ASA President</li> <li>• Professor Alan Robson, Vice Chancellor, University of Western Australia</li> <li>• Professor Linda Kristjanson, Deputy Vice Chancellor, Curtin University of Technology</li> </ul>	
	<b>Session 1</b>	<b>Chair: Lister Staveley-Smith</b>
<b>09:30</b>	Kate Brooks (In)	Observing the early stages of massive star formation
<b>10:00</b>	Stephen Marsden	Stellar spectropolarimetry: mapping the stars
<b>10:20</b>	Tiago Pereira (St)	Observing Oxygen lines across the solar disk: a test of 3D atmospheric models
<b>10:40</b>	<b>COFFEE AND POSTERS</b>	
	<b>Session2 : ANSOC</b>	<b>Chairs: Lister Staveley-Smith/Michael Barber</b>
<b>11:10</b>	Michael Barber	The Astronomy NCRIS Strategic Options Process
<b>11:30</b>	Will Saunders	The PILOT Design Study
<b>11:50</b>	Penny Sackett	The Giant Magellan Telescope: Recent Developments and Opportunities
<b>12:10</b>	Warrick Couch	The "Additional 8m Access" Option: opportunities and benefits
<b>12:30</b>	Matthew Colless	The future of the AAO
<b>12:50</b>	<b>LUNCH &amp; POSTERS – Lunch provided by AAL</b>	
	<b>Lunch Meetings: ATNF update; PILOT update</b>	
	<b>Session 3</b>	<b>Chair: Penny Sackett</b>
<b>14:00</b>	Roland Crocker (In)	The gamma-ray and radio glow of the Central Molecular Zone and the Galactic centre magnetic field
<b>14:30</b>	Rob Wittenmyer	A search for Multi-Planet Systems
<b>14:50</b>	Grant Kennedy (St)	Hot Super-Earths
<b>15:10</b>	John McFerran	An astro-comb based on a harmonically mode-locked fibre-laser: proposal and initial tests
<b>15:30</b>	<b>COFFEE AND POSTERS</b>	
	<b>Session 4</b>	<b>Chair: David Blair</b>
<b>16:00</b>	Chiaki Kobayashi (In)	Simulations of Cosmic Chemical Enrichment
<b>16:30</b>	Terry Bridges	Gemini/GMOS Spectroscopy of Globular Clusters in Early-Type Galaxies
<b>16:50</b>	Lee Spitler (St)	The remarkable connection between galaxy halos and their globular cluster systems
<b>17:10</b>	Jon Mendel (St)	The Anatomy of a Galaxy Group: Stellar Populations and Group Galaxy Evolution
<b>17:30</b>	Stefan Keller	An Act of Galactic Cannibalism – the Virgo Over Density
<b>17:50</b>	<b>CLOSE</b>	
<b>19:30</b>	<b>HARLEY WOOD PUBLIC LECTURE - John Dickey (Woolnough LT)</b>	

**ASA2008 SCIENTIFIC PROGRAM**  
**(Tattersall Lecture Theatre and MCS Building, UWA)**

**Tuesday 8<sup>th</sup> July 2008**

<b>Session 5</b>		<b>Chair: David Coward</b>
<b>09:00</b>	Duncan Galloway (In)	Searching for X-ray spectral features in expanding neutron-star atmospheres
<b>09:30</b>	Lilia Ferrario	Massive stars as progenitors of magnetars
<b>09:50</b>	Stephen Ng	Fourier Modeling of the Radio Torus Surrounding of Supernova 1987A
<b>10:10</b>	Toby Potter (St)	Simulating the expansion and emission of supernova remnant SN1987A
<b>10:30</b>	Brad Tucker (St)	Host Galaxy Properties of Type Ia Supernovae and Their Effects on Cosmology
<b>10:50</b>	<b>COFFEE AND POSTERS</b>	
<b>Session 6</b>		<b>Chair: Elaine Sadler</b>
<b>11:20</b>	Catherine Buchanan (In)	Unveiling the nature of Seyfert nuclei with 1-100 micron spectral energy distributions
<b>11:50</b>	Sarah Brough	The luminosity-halo mass relation for brightest cluster galaxies
<b>12:10</b>	Kate Randall (St)	Classifying the sub-milliJansky radio population
<b>12:30</b>	Nicholas Bate (St)	Probing quasar accretion disks with gravitational microlensing
<b>12:50</b>	<b>LUNCH &amp; POSTERS – Lunch provided by DOIR</b>	
<b>Session 7 : Posters &amp; Gravity Waves and Synergies</b>		<b>Chair: David McClelland</b>
<b>14:00</b>	<b>Poster Sparkler Talks</b>	
<b>14:20</b>	Stanley Whitcomb (In)	Gravitational Wave Astronomy using LIGO
<b>14:50</b>	Linqing Wen (In)	Perspective on Identifying Electromagnetic Counterparts of Gravitational-Wave sources
<b>15:20</b>	<b>COFFEE AND POSTERS</b>	
<b>Session 8 : Gravity Waves and Synergies (contd.)</b>		<b>Chair: David McClelland</b>
<b>15:50</b>	Daniel Shaddock (In)	The Laser Interferometer Space Antenna: the science and the mission
<b>16:20</b>	George Hobbs (In)	Pulsars as Gravitational-Wave Detectors
<b>16:50</b>	Matthias Vigelius (St)	Neutron star astrophysics with gravitational waves
<b>17:10</b>	Sarah Burke (St)	Supermassive Binary Black Holes: A Survey for Arcane Monsters
<b>17:30</b>	David Blair	Fundamental physics and cosmology with gravitational and electromagnetic observation of black hole and neutron star binaries
<b>17:50</b>	<b>CLOSE</b>	
<b>19:00</b>	<b>Heads of Departments and NCA MEETING (Conference Room 4.54, School of Physics)</b>	

**ASA2008 SCIENTIFIC PROGRAM**  
**(Tattersall Lecture Theatre and MCS Building, UWA)**

**Wednesday 9<sup>th</sup> July 2008**

<b>Session 9 : SKA/Optical Synergies</b>		<b>Chair: Ilana Feain</b>
<b>09:00</b>	Patrick McCarthy (In)	Scientific Synergies Between the Giant Magellan Telescope and the Square Kilometer Array
<b>09:30</b>	Andrew Hopkins (In)	A multiwavelength approach to galaxy evolution in the era of SKA pathfinders
<b>10:00</b>	Tara Murphy (In)	From MOST to MWA: Exploring the Variable Radio Sky with Wide Field Imaging
<b>10:30</b>	Krzysztof Bolejko	Testing the Copernican Principle
<b>10:50</b>	<b>COFFEE AND POSTERS</b>	
<b>Session 10</b>		<b>Chair: Martin Meyer</b>
<b>11:20</b>	Simon Driver (In)	Luminous Matter and Luminous Energy
<b>11:50</b>	Chris Blake (In)	First Results from the WiggleZ Dark Energy Survey
<b>12:20</b>	Michael Brown	The past 8 Billion Years of Red Galaxy Growth
<b>12:40</b>	Stephen Curran	Where is the 21-cm absorption by hydrogen in high redshift galaxies and quasars?
<b>13:00</b>	<b>LUNCH &amp; POSTERS – Lunch provided</b>	
<b>14:00</b>	<b>Session 11 : AGM</b>	
<b>15:30</b>	<b>COFFEE AND POSTERS</b>	
<b>Session 12</b>		<b>Chair: Roger Clay</b>
<b>16:00</b>	<b>Poster Sparkler Talks</b>	
<b>16:20</b>	Bruce Dawson (In)	Particle Astrophysics with the Pierre Auger Observatory
<b>16:50</b>	Julian King (St)	Stringent constraint on cosmological variation of the proton-to-electron mass ratio
<b>17:10</b>	Rebecca McFadden (St)	The LUNASKA Project: UHE Neutrino Detection using the Lunar Cherenkov Technique
<b>17:30</b>	Marc Duldig	Recent solar production of relativistic protons
<b>17:50</b>	<b>CLOSE</b>	
<b>19:30</b>	<b>ASM DINNER (Perth Flying Squadron Yacht Club)</b>	

**ASA2008 SCIENTIFIC PROGRAM**  
**(Tattersall Lecture Theatre and MCS Building, UWA)**

**Thursday 10<sup>th</sup> July 2008**

Session 13		Chair: Peter Quinn
09:00	Christopher Hales (St)	Cosmic Forensics: A Study of the Pulsar Wind Nebula G359.23-0.82, - "The Mouse" (Bok Prize Lecture)
09:20	Alastair Edge (In)	The UKIRT Infrared Deep Sky Survey – progress and prospects
09:50	Martin Meyer	Dissolving Stellar Clusters and the Diffuse UV Background in Nearby Galaxies
10:10	Mark Allen	Investigating Ionization Mechanisms in Active Galaxies: From Individual Objects to Large Samples
10:30	<b>COFFEE AND POSTERS</b>	
Session 14 : Education and Outreach		Chair: Marjan Zadnik
11:00	Robert Hollow (In)	PULSE@Parkes; Engaging students in science through pulsar observations
11:30	Paul Francis	The Unlecture Project
11:50	Lesa Moore (St)	Bringing Deep Space into the Classroom
12:10	Christopher Fluke	Enabling 3-D Astronomy: Integrated Research, Presentation, Publication and Education Outcomes
12:30	Helen Sim	IYA2009 Update
12:50	<b>LUNCH &amp; POSTERS – Lunch provided</b>	
Session 15		Chair: Steven Tingay
14:00	Jean-Pierre Macquart (In)	Detecting Impulsive Transients at Low Radio Frequencies
14:30	Matthew Bailes	Radioastronomy in Software
14:50	Hayley Bignall	The VLBI morphology and redshift dependence of scintillating radio sources
15:10	Kenji Bekki	Formation of HI streams around galaxies
15:30	<b>COFFEE AND POSTERS</b>	
Session 16		Chair: Warrick Couch
16:00	David Frew	Can single stars produce planetary nebulae?
16:20	Mike Pracy	A Combined Radio and Optical Study of Abell 370
16:40	George Hau	The search for "hermaphrodite" galaxies – early type galaxies undergoing inverse morphological transformation
17:00	<b>CLOSE</b>	

## ASA2008 SCIENTIFIC PROGRAM: poster session (MCS Building, UWA)

### Poster Session

Michael	Ashley	Pre-HEAT: submillimeter site testing and astronomical spectra from Dome A, Antarctica
Michael	Ashley	The PLATO remote observatory for the Antarctic plateau
Keith	Bannister	Use of Graphics Processor Units in Astronomical Data Reduction Pipelines
Samuel	Barden	Concepts for a high resolution multi-object spectrograph for galactic archeology on the Anglo-Australian Telescope
Pablo	Barriga	Stable Power Recycling Cavity for Advanced Gravitational Wave Detectors
Daniel	Bayliss	The SuperLupus Transit Survey
Mark	Bennett	Gravitational waves from pulsar glitches
James	Biggs	Internet telescopes at Perth Observatory
Colin	Bonner	SNODAR: a new instrument to measure the height of the atmospheric boundary layer on the Antarctic plateau
Tui	Britton	High dynamic range direct imaging of extrasolar planets with an off-axis Antarctic telescope
Ronald	Burman	Quasi-Dipole Pulsar Magnetic Fields
Donna	Burton	Identifying active young solar-type stars for Zeeman Doppler Imaging
Michael	Burton	Multiple Molecular Line Mapping of the Central Molecular Zone
Roger	Clay	Cosmic Ray Propagation in a Fractal Galactic Medium
Roger	Clay	Time Delays in Cosmic Ray Propagation
Jackie	Cooper	Radiative Cooling and the Survival of Clouds in a Supersonic Wind
Ricardo	Covarrubias	Magellan Telescopes in Las Campanas Observatory
Ricardo	Covarrubias	Does the Metallicity Affect the Fate of Massive Stars?
David	Coward	The frontier of transient astronomy: new computational tools for probing the Universe with transients
Maria	Cunningham	Star Formation and Feedback in the G333 Molecular Cloud Complex
Gary	Da Costa	Exploring the Virgo Stellar Stream
Amitava	Datta	Using Graphics Processing Units for Speeding up Gravitational Wave Data Analysis
Jacqueline	Davidson	Magnetic Field Directions associated with YSO Outflows
Jacinta	Delhaize	Gas and Dust in the Magellanic Stream
Marc	Duldig	<sup>10</sup> Be concentrations in Antarctic snow following the 29 Oct 2003 and 20 Jan 2005 solar cosmic ray events
Jean-Charles	Dumas	AIGO High Performance Compact Vibration Isolation System
Ilana	Feain	The ASKAP Science User Policy
Ilana	Feain	A long overdue synthesis image of Centaurus A
Christopher	Fluke	Virtual Field Trips: Teaching the history of astronomy with Google Maps
Peter	Gillingham	PILOT enclosure – a study of seeing and outside air infiltration
Michael	Goodwin	Siding Spring SLODAR Turbulence Ranging Campaign
Alister	Graham	The HST/ACS Treasury Survey of the Coma galaxy cluster
Brendan	Griffen	Globular Cluster Formation in Cosmological Simulations
Chris	Harris	GPU Accelerated Radio Astronomy Signal Convolution
Shane	Hengst	PLATO Power - a robust, low environmental impact power generation system for the Antarctic plateau
Eric	Howell	Constraining the rate densities of gamma ray bursts from their temporal and brightness distributions
Stephen	Hughes	The Scientist in Schools scheme - an opportunity for astronomers to inspire school students
Alan	Imerito	Low-Luminosity GRBs and Next Generation Satellite Detectors
Melanie	Johnston-Hollitt	Radio Luminosity Functions in Galaxy Clusters: New Results from the Horologium-Reticulum Supercluster
Paul	Jones	Turbulence in the molecular medium from multi-line mapping
Grant	Kennedy	The Snow Line and the Frequency of Giant Planets

**ASA2008 SCIENTIFIC PROGRAM: poster session  
(MCS Building, UWA)**

Wolfgang	Kerzendorf	Looking for the smoking gun - Progenitor systems of Type Ia Supernovae
Madhura	Killedar	Quantifying the thin-lens approximation with ray-tracing
Laszlo	Kiss	Debris disks around young stars
Jonathon	Kocz	RFI removal using the Parkes multibeam receiver
Juliana	Kwan	Dark Energy and Inhomogeneous cosmologies
Richard	Lane	Tracing the Enigmatic Monoceros Structure
Sally	Langford	Photometric Variability in Earthshine Observations Associated with a Continental Coastline
Karen	Lewis	Detecting Moons of Pulsar Planets Through Time-of-Arrival Perturbation
Karen	Lewis	Detectability of moons of transiting planets using realistic stellar lightcurves
Diana	Londish	The Australian SKA Pathfinder
Elizabeth	Mahony	The View at 20GHz: Optical Properties of the AT20G Survey
Ralph	Martin	VRI light curves of supernova SN2004S
Marc	McAuley	Astronomy Australia Limited
Emily	McNeil	The Dynamics of Elliptical Galaxies
Zdenka	Misanovic	Phase-resolved spectroscopy of the thermally-emitting PSR J1740+1000
Zdenka	Misanovic	Thermonuclear burst studies
Simon	Murphy	The Gemini Planet Imager: revealing young planets around nearby stars
Christine	Nicholls	The Mystery of Long Secondary Periods
Simon	O'Toole	Selection Effects in the Anglo-Australian Planet Search
Kevin	Pimblett	Evolution in Filaments of Galaxies over 3.5 Gyr.
Maxim	Priymak	A Realistic Equation of State of Neutron Star Magnetic Mountains
Stuart	Ryder	A surviving Wolf-Rayet Companion to Supernova 2001ig
Penny	Sackett	Discovering and Characterising Transiting Planets from Australia: Preparing for the GMT Era
Letizia	Sammut	Downhill Simplex Algorithm search for periodic signals in noisy data
Martin	Saul	Molecular Proto-Disks in Corona Australis
Will	Saunders	Science Drivers for PILOT
Maxim	Spolaor	Insights on the origin of dwarf early-type galaxies in the Virgo and Fornax clusters
Sunil	Susmithan	Vacuum design issues for AIGO
William	Tango	The PAVO beam-combiner at SUSI and ROCS
Timo	Vaalsta	The Zadko Telescope: searching for transients in the nearby and high-z Universe
Scott	Wales	Evolving Dark Energy in Cosmological Simulations
Andrew	Walsh	First results from HOPS
Eduard	Westra	Absolute photometry down to 1% accuracy
Dayal	Wickramasinghe	The accretion induced collapse hypothesis and the origin of millisecond pulsars
Chunnong	Zhao	Challenges of Next Generation Ground Based Interferometric Gravitational Wave Detectors