



# Queensland Astronomy Education Conference

## 20th March



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**GRACE OBSERVATORY**

At Grace Lutheran College, we've had an interest in astronomy and space education for some years now. An observatory, with a 4.5m rotating dome, houses a Celestron (C-14) telescope and sits proudly atop our science block in the middle of the campus. It enables students to view some of the many wonders of Creation from near-space objects such as the Moon and planets to faint deep-space objects including galaxies and nebulous gas clouds.

We are also refurbishing a radio telescope that was originally part of an array at Narrabri in NSW. This array was previously leased by NASA and used to study solar activity. It will be utilised within the science curriculum as a practical tool for gathering solar data, but it is also a wonderful piece of Australia's scientific heritage restored and preserved.

We believe strongly in solid theoretical science, and we equally support the notion that theory must be seen in practice to promote total learning as experienced in both our optical and radio observatories.

FUNDED BY

**GAMING MACHINE COMMUNITY BENEFIT FUND**

Investing in the Community

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### "Excellence in Education through the Space Theme"

Do you want to achieve best practice in your teaching through a theme approach and get the most out of the new Science KLA Syllabus? If the answer is yes, then reserve Saturday, 20th March, 1999, to attend the fourth bi-annual Queensland Astronomy Education Conference. Expose yourself to the latest and best in "hands-on, minds-on" activities, and resources from the United States and Australia to bring out the best in your students and yourself.

"As more students and teachers became involved, the surer we were that space truly was a universal curriculum that touched on required skills at every grade level... The Cosmic Classroom project took the unifying theme of space and developed the knowledge and skills from mathematics, science, language arts, social studies and the fine arts..."  
Cosmic Classroom Module D: 7-10 Space Center Houston (1998)

### Programme

Following the presentation by the Conference Keynote speaker, participants will be able to choose four sessions (out of a total of sixteen options) in which to participate. There will also be a presentation by a representative from the Queensland School Curriculum Council on the new Science K.L.A. Syllabus, the day being completed with a hands-on night observing session.

The following speakers have been confirmed as of 1st February, 1999. (Note that speakers' personal circumstances may cause this list to change, and this is beyond the conveners' control).

### Day Session

#### KEYNOTE SPEAKER

Ms Valerie Perry  
Education Officer, Mt. Stromlo Exploratory

#### "Selling Astronomy"

This presentation will introduce you to the excitement of working in both a Visitors Information Centre and a Research Observatory. It contains "tricks of the trade" used in capturing the imagination of students of all ages.

"Selling Astronomy" is an anecdotal speech that will inspire one and all to try some of the practical ideas suggested to open up a whole new world of science teaching.

#### GENERAL

#### Introduction to the New 1-10 Science Syllabus

Maggie Spenceley  
Queensland School Curriculum Council

#### Ideas for Activity-based Astronomy Programmes in Schools

Dr Ian Gains  
Centre for Mathematics and Science Education  
Q.U.T. Kelvin Grove

#### A Beginner's Guide to the Solar System

Brisbane Astronomical Society

#### Making Learning Exciting: the Use of Astronomy in a Cross-curriculum Approach

Eva Carlson  
Melbourne Planetarium — Science Works

#### A Beginner's Guide to the Rest: A Universal Update!

Brisbane Astronomical Society

#### Patterns in the Sky & the New Science K.L.A. Syllabus (a portable planetarium session)

Paul Floyd  
Southern Star Education

#### Solar System Activities for the Classroom

Brisbane Astronomical Society

#### The Stromlo Exploratory Hands On Teacher Resource Book

Valerie Perry  
Education Officer, Mt. Stromlo Exploratory

#### Practical Astronomy for Middle Primary (Activities for the New Science K.L.A. Syllabus)

Lois Padgham  
Southern Star Education

#### Astronomy Education Via the Internet

Professor Matthew Balles  
Swinburne Centre for Astrophysics and Super Computing

#### Stromlo Exploratory: Our Unique Teacher Package

Valerie Perry  
Education Officer, Mt. Stromlo Exploratory

#### The "Cosmic Classroom"

#### Introduction to Telescopes

Anne-Louise Hawes  
Brisbane Astronomical Society

#### School Excursion to Mars

Aaron Chippendale  
Australian Students Space Association

#### Minds on Physics, Hands on Rockets

Brisbane Astronomical Society

#### Space Science Modules at Brisbane CSIRO/ESC

CSIRO Brisbane Education Centre

#### Astronomy on School Camps

Nev Johnson  
Brisbane Astronomical Society

### Night Session

The night programme (6.15 p.m. till late) will focus on providing practical observing experience using a variety of telescopes (including Grace Lutheran College's observatory) and other observing aids.

### Displays

Various organisations will have displays on the day. These include: Mt. Stromlo Exploratory, York Optical, Brisbane Astronomical Society, Southern Star Education

### Conference Websites

Visit the conference conveners' websites (addresses at bottom of poster) for the latest conference information. You will find:

- **Links to major conference sponsors**
- **CSIRO Double Helix Club activity information**  
Double Helix members nationwide are carrying out an astronomy activity in the lead-up to the conference. Find out what they are doing.
- **Conference timetable**  
This will be updated as the conference day approaches.
- **Observing highlights for the night of the conference**

### Free Resource Folder

The first 70 participants to register for the 1999 Queensland Astronomy Education Conference will receive a free 340-page resource folder containing teaching material and astronomical computer shareware.

These folders are being made available free, courtesy of funds provided by the Gaming Machine Community Benefit Fund.

The folder will contain two of the cross-curriculum Cosmic Classroom modules produced by Space Centre Houston (a non-profit offshoot of NASA's Johnson Space Centre). Each module contains cross-curriculum activities based on the "Space" theme. The activities (with ready-to-go photocopy masters) are based around Bloom's Taxonomy and address the following unifying themes of Science: structure, models, measurement, change, interactions and human effect. This material is likely never to be made available commercially.

Participants who register late (and miss out on receiving a free copy) will have the option of ordering a copy on the day.

### Registration

#### REGISTRATION FEE

\$54.90

NOTE: Discounts are not available due to catering costs.

#### CONFERENCE BENEFITS

- **Participant Folder** (containing speaker notes and sponsors material).
- **Conference Resource Folder:** The first 70 participants to register will receive a free copy of the resource folder.
- **Fully Catered Day:** Morning and afternoon tea, lunch (spit roast) and dinner (B.B.Q.) are provided.

**Photocopy this form**  
(One form per person)

Complete the form below (one per person), enclose a cheque (made payable to the Brisbane Astronomical Society) or school order form and mail to: Q.A.E.C., 99 Registrations, Brisbane Astronomical Society, 34 Kilkenny Street, Acacia Ridge, QLD 4110. Further information will be mailed to you on 12th March, 1999.

Name: \_\_\_\_\_  
 Position (if app.): \_\_\_\_\_ School Name (if app.): \_\_\_\_\_  
 School Address: \_\_\_\_\_ Postcode: \_\_\_\_\_  
 Contact address (if different): \_\_\_\_\_ Postcode: \_\_\_\_\_  
 Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_ E-mail: \_\_\_\_\_

My conference registration fee of \$54.90 is enclosed as: 1. Cheque or 2. School order form (please circle)

NOTE: 1. Full payment must be included with the registration form to enable you to receive a copy of the Conference resource folder. 2. Only the first 70 participants to register will receive a free copy of the folder.

Office use only  
Date form received: / / 99  
Registration Form: \_\_\_\_\_  
Receive Resource Folder: Yes/No

### Venue



Grace Lutheran College (Redcliffe)

### Activities



Welcome



Sungazing



Computing



Planetarium Session



Lift-off



**BRISBANE ASTRONOMICAL SOCIETY**  
34 Kilkenny Street, Acacia Ridge QLD 4110  
Phone: (07) 3274 5073  
E-mail: firstlight@uq.net.au  
Website: http://www.ozemail.com.au/~nwiliam/bas/bas.html

*Conference Conveners*

**SOUTHERN STAR EDUCATION**  
96 Doncaster Drive, Beechmont QLD 4211  
Phone/Fax: (07) 55 333 610 • Mobile: 0408 884 380  
E-mail: ssemps@ozemail.com.au  
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