

IAU Symposium 339

NOVEMBER 13-17, 2017 • STELLENBOSCH, SOUTH AFRICA

SOUTHERN HORIZONS IN TIME-DOMAIN ASTRONOMY

IAU Symposium 339 diverges from tradition by featuring topical workshops that emphasize discussion, seek cross-cutting technical solutions, and foster new research collaborations



Seneca: Time discovers truth

Invited Speakers

Tara Murphy, Australia (Keynote)
Conny Aerts, Belgium
Luis Balona, South Africa
Bruce Bassett, South Africa
George Djorgovski, USA
Laurent Eyser, Switzerland
Eric Feigelson, USA
Rob Fender, UK
Giuliana Fiorentino, Italy
Duncan Galloway, Australia
Melissa Graham, USA
Daryl Haggard, USA
Susanne Höfner, Sweden
Daniel Huber, USA
John Hutchings, Canada
Stephen Justham, China
Shri Kulkarni, USA
Klaus-Peter Schröder, Mexico
Zheng-Hong Tang, China
Barry Welsh, USA

Science Organizing Committee

Elizabeth Griffin, Canada (Co-chair)
Rob Seaman, USA (Co-chair)
Mark Sullivan, UK (Co-chair)
Patrick Woudt, South Africa (Co-chair)
Francisco Forster, Chile
Stella Kafka, USA
Gillian Knapp, USA
Kate Maguire, UK
Shazrene Mohamed, S Africa
Tara Murphy, Australia
Carole Mundell, UK
Eran Ofek, Israel
Kaz Sekiguchi, Japan
Antonia Rowlinson, Netherlands
Pravjal Shastri, India
Lukasz Wyrzykowski, Poland

Local Organizing Committee

Patrick Woudt (Co-chair)
David Buckley (Co-chair)
Lee Townsend
Shazrene Mohamed
Anja Schroeder
Carol Marsh
Nazli Mohamed



<http://iaus339.ast.uct.ac.za>

Priorities & Multi-Facility Scheduling

Discussion Session

Where can we join forces?

Facility Specific

Standardised Approach

Transient message
(e.g. VOEvent)

Filtering of messages
(e.g. 4 Pi Sky Hub, GCN)

Triggering message to
facility

Facility software to
handle triggers

Filtering priority strategy

Optimal scheduler

Observation & data
processing

Distribute standard
transient message

Where else?

Database of trigger
information for querying
(see Phil Evans talk)

Recommended multi-facility transient policy document?

- Not enforced, but standardised advice for the community managing facilities?
- Common priority ranking strategy to determine if standard observations can be overridden
- Are we happy with the TACs determining which transients are more important? E.g. GWs > GRBs > FRBs
- Advice for TACs
 - Suggest a transient/variable expert on all TACs
 - Proposal prioritisation taking into account triggers
 - Recommended content to look for in assessing transient proposals e.g. triggering criteria and response time requirements

Currently focused on facilities responding in isolation ... should we be automatically co-observing?

- Examples (such as for GW follow-up):
 - LOFAR will only observe if CTA is observing
 - ATCA will target the same galaxy candidates as Swift
 - Swift and SVOM X-ray telescopes will co-ordinate response to search different fields
 - Schedule observations automatically for simultaneous multi-wavelength data
- Would this be useful / revolutionary? For what science cases?
- What is the best way to implement this? What 2-way communication protocol is best? Advanced VOEvents or something new?