

# ADASS 2014 Program

Saturday: 4 October 2014

18:00 – 21:00 Reception and Registration

Sunday: 5 October 2014

*Breakfast* 07:00 – 08:30 (Mayfair room)

*Lunch* 11:15 – 13:15 (Mayfair room)

Registration Open: 10:30 – 14:00

Posters may be put up after 12:00

13:45 – 14:00 Welcoming Remarks

R. Winsor (Cybera), C. Gabriel

## **Big Data Challenges (part I)**      **Chair: Carlos Gabriel**

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|---------------|-----------------------------------------------------------------------------------------------------------|-----------------|
| 14:00 – 14:30 | O1.1: <b>Rule-based Cross Matching of Very Large Catalogues</b>                                           | <b>P. Ogle</b>  |
| 14:30 – 14:45 | O1.2: Data Management Challenges in Gaia                                                                  | J. Hernandez    |
| 14:45 – 15:00 | O1.3: Rapid Large-Scale Reprocessing of the ODI Archive Using the QuickReduce Pipeline                    | A. Gopu         |
| 15:00 – 16:00 | <i>Coffee and Poster Viewing</i>                                                                          |                 |
|               | <b>Chair: Sebastien Derriere</b>                                                                          |                 |
| 16:00 – 16:30 | O1.4: <b>Enabling Scalable Data Analytics for LSST and Beyond Through Qserv</b>                           | <b>J. Becla</b> |
| 16:30 – 16:45 | O1.5: Exploring the Ghost in the Machine: Synthetic Spectral Data Cubes for Assessing Big Data Algorithms | M. Araya        |
| 16:45 – 17:00 | O1.6: Towards a Next-gen Catalogue Cross-match Service                                                    | F. Pineau       |
| 17:00 – 17:15 | O1.7: The Hubble Source Catalogue                                                                         | S. Lubow        |

## Monday: 6 October 2014

*Breakfast* 07:00 – 08:15 (Mayfair room)

### **Data Analysis and Pipelines (part I)**    **Chair: Jim Lewis**

08:45 – 09:15	O2.1: <b>How Should Astronomy Pay for Software?</b>	<b>F. Economou</b>
09:15 – 09:30	O2.3: Stacking of Radio Surveys	J. Stil
09:30 – 09:45	O2.4: Long-term Preservation of Data Analysis Capabilities	C. Gabriel
09:45 – 10:00	O2.5: The PLATO Exoplanet Analysis System- Data Processing Challenges from the Next Generation Planet Hunter	N. Walton
10:00 – 11:15	<i>Coffee and Poster Viewing</i>	

### **Big Data Challenges (part II)**    **Chair: Tadafumi Takata**

11:15 – 11:45	O3.1: <b>SKA Data Delivery Options</b>	<b>R. Simmonds</b>
11:45 – 12:15	O3.2: <b>Data Challenges and Strategies for Large Pulsar Projects</b>	<b>I. Stairs</b>
12:15 – 12:30	O3.3: The Future of Astronomy and the ALMA Archive	F. Stoehr

12:30 – 14:15    *Lunch (Mayfair room)*

### **Metadata Management and File Formats for Astronomical Data**    **Chair: Pascal Ballester**

14:15 – 14:30	O4.1: Astronomical Data Integration beyond the Virtual Observatory	G. Lemson
14:30 – 14:45	O4.2: Managing Hardware Configurations and Data Products for the Canadian Hydrogen Intensity Mapping Experiment	A. Hincks
14:45 – 15:00	O4.3: A Glimpse at Different File Formats	K. Shortridge
15:00 – 15:15	O4.4: Is HDF5 a Good Format to Replace UVFITS?	D. Price
15:15 – 15:45	<i>Coffee</i>	
15:45 – 16:15	<i>Focus Demo Enabling Collaboration Between Astronomers</i>	W. Anderson
16:15 – 18:00	<b>BoF Session on Astronomical Data Formats</b>	J. Mink and B. Mann

Tuesday: 7 October 2014

*Breakfast* 07:00 – 08:15 (Mayfair room)

**Visualization for Astronomy**      **Chair: Tony Krueger**

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| 08:45 – 09:15 | O5.1: <b>Hackable User Interfaces in Astronomy</b>                                                                  | <b>C. Beaumont</b> |
| 09:15 – 09:30 | O5.2: The Cube Analysis and Rendering Tool for Astronomy                                                            | E. Rosolowsky      |
| 09:30 – 09:45 | O5.3: Immersive 3D visualization of astronomical data                                                               | A. Schaaff         |
| 09:45 – 10:00 | O5.4: Spectral Cube Visualization and Explorer Tool from the Herschel Interactive Processing Environment            | J. de Jong         |
| 10:00 – 10:15 | O5.5: Hierarchical methods for the generation, publication and visualization of huge astronomical data cube surveys | P. Fernique        |

10:15 – 11:15 *Coffee and Poster Viewing*

**Chair: Arnold Rots**

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| 11:15 – 11:45 | O5.6: <b>Reviewing ChIPS, Chandra Interactive Plotting System</b>                | <b>J. Miller</b> |
| 11:45 – 12:00 | O5.7: Web-based 2-d visualization with large data sets                           | T. Goldina       |
| 12:00 – 12:15 | O5.8: Large Astronomy imaging with JPEG2000                                      | S. Kitaeff       |
| 12:15 – 12:30 | O5.9: Scientific Visualization of Radio Astronomy Data using Gesture Interaction | P. Mulumba       |
| 12:30 – 12:45 | O5.10: Analysing Living Surveys: Visualization Beyond the Data Release           | H. Buddelmeijer  |

12:45 – 14:30 *Lunch (Mayfair room)*

**Large Surveys**      **Chair: Harry Teplitz**

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|---------------|----------------------------------------------------------------------------------------------------------|-------------------|
| 14:30 – 15:00 | O6.1: <b>How is Gaia Doing at L+10m?</b>                                                                 | <b>U. Lammers</b> |
| 15:00 – 15:30 | O6.2: <b>The Palomar Transient Factory: Challenges in Rapid Turnaround, High Quality Data Processing</b> | <b>J. Surace</b>  |
| 15:30 – 15:45 | O6.4: Organizing the Euclid Data                                                                         | F. Pasian         |

15:45 – 16:30 *Coffee*

16:30 – 17:00 Focus Demo Data Analysis Centre for Exoplanets      N. Buchschacher

17:00 – 18:30 BoF Session on the Future of ADASS      N. Lorente

19:00 - *Conference Banquet (Mayfair room)*

Wednesday: 8 October 2014

*Breakfast* 07:00 – 08:15 (Mayfair room)

**Web Services and APIs**      **Chair: Nuria Lorente**

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| 09:00 – 09:30 | O7.1: <b>ADS 2.0: New Architecture, New API, New Functionality</b>   | <b>R. Chyla</b> |
| 09:30 – 09:45 | O7.3: Aggregating Metadata from Multiple Archives: a Non-VO Approach | S. Gwyn         |
| 09:45 – 10:00 | O7.4: The OmegaCAM-VST and MUSE-VLT Survey Federations               | G. Kleijn       |
| 10:00 – 10:15 | O7.5: Next Generation Search Interfaces                              | W. Roby         |

10:15 – 11:30 *Coffee and Poster Viewing*

**Chair: Bettie Stobie**

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|---------------|-----------------------------------------------------------------------------------------------------------|------------------|
| 11:30 – 12:00 | O7.6: <b>Building Model Universes in the Cloud: The Theoretical Astrophysical Observatory</b>             | <b>D. Croton</b> |
| 12:00 – 12:15 | O7.7: PPA Stack: User Driven Image Stacking for ODI data and Beyond via a Highly Customized Web Interface | S. Hayashi       |
| 12:15 – 12:30 | O7.8: The NRAO Archive and Pipeline Processing Interface                                                  | M. Lacy          |

12:30 – 14:15 *Lunch (Mayfair room)*

**Data Analysis and Pipelines (part II)**      **Chair: Keith Shortridge**

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| 14:15 – 14:30 | O8.1: Source Detection and Classification in Euclid                                                                               | M. Kuemmel    |
| 14:30 – 14:45 | O8.2: TPHOT: Advanced Techniques of Precision Photometry for Present and Future Multiwavelength Surveys                           | E. Merlin     |
| 14:45 – 15:00 | O8.3: Improving Resolution and Depth of Astronomical Observations with the Help of Modern Mathematical Methods for Image Analysis | M. Castellano |
| 15:00 – 15:15 | O8.4: Deblurring Atmospherically Distorted Images using pyMFBD, a Streaming GPU-accelerated Multiframe Blind Deconvolution Tool   | M. Lee        |
| 15:15 – 15:30 | O8.5: AstroCloud, A Cyber-infrastructure for Astronomy Research: Overview                                                         | C. Cui        |

15:30 – 15:50 Closing Remarks including Best Poster Award      C. Gabriel

15:50 – 16:30 *Coffee and Poster Removal*

16:30 – 18:00 BoF on Distributed Science Operations in the VO-Enabled World      T. McGlynn

Thursday: 9 October 2014

*Breakfast* 07:00 – 08:15 (Mayfair room)

**OpenStack Workshop presented by Joe Topjian and Micheal Jones from Cybera**

09:00 – 10:00 Introduction to Cloud Computing and OpenStack

10:00 – 10:30 *Coffee*

10:30 – 12:00 OpenStack Tools Demonstration (Interactive)

12:00 – 13:00 *Break (no food provided)*

13:00 – 14:00 OpenStack and CyberSKA Visualization Demonstration and Q&A