

**MONDAY, AUGUST 19**

9:30 – 9:40 AM	Welcome & Opening Remarks: Raffaella Margutti (Northwestern)	
<b>Session 1</b>	<b>Lessons Learned from Past &amp; Current Surveys</b>	<b>Chair: Candice Stauffer</b>
9:40 – 10:10 AM	Maria Drout (U. of Toronto): <i>Time Domain Astro in the 2020s</i>	
10:10 – 10:25 AM	Sara Webb (Swinburne University of Technology): <i>Science with DWF: The Second to Minute Transient Universe</i>	
10:25 – 10:40 AM	Regis Cartier (CTIO/NOAO): <i>The NIR ULTRA-VISTA SN survey</i>	
10:40 – 10:55 AM	Matthew Lehner (Academia Sinica Institute of Astronomy & Astrophysics): <i>Status of the Transneptunian Automated Occultation Survey (TAOS II)</i>	
	<b>COFFEE BREAK</b>	
11:15 – 11:55 AM	<b>Panel: Lessons Learned from Past &amp; Current surveys: PanSTARRS, ZTF, ASASSN, DLT-40, ASASSN, DWF</b> Moderator: Sara Webb (Swinburne University of Technology)	
	Ryan Chornock (Ohio U.), Maria Drout (U. of Toronto), Christoffer Fremling (Caltech), Dave Sand (U. of Arizona), Benjamin Shappee (U. of Hawaii)	
<b>Session 2</b>	<b>The Future with LSST</b>	<b>Chair: David Matthews</b>
11:55 – 12:15 PM	Rachel Street (Las Cumbres Observatory): <i>The Future: Transient Science Enabled by LSST</i>	
12:15 – 12:35 PM	Melissa Graham (LSST & U. of Washington): <i>The Future: LSST (Data Products)</i>	
	<b>LUNCH BREAK</b>	
<b>Session 3</b>	<b>Alert Packet Tools</b>	<b>Chair: Lindsay DeMarchi</b>
2:05 – 2:25 PM	Eric Bellm (U. of Washington): <i>The Future: LSST (Alert Distribution and Filtering)</i>	
2:25 – 2:45 PM	David Collom (Las Cumbres Observatory): <i>Demo Session on MARS</i>	
2:45 – 3:00 PM	Scott Barthelmy (Las Cumbres Observatory): <i>The Time-domain Astronomy Coordinate Hub</i>	
3:00 – 3:15 PM	Emily Petroff (University of Amsterdam Astronomical Institute): <i>A VOEvent Standard for Fast Radio Bursts and its Applications</i>	
3:15 – 3:30 PM	Michael Briggs (U. of Alabama): <i>Real-Time Alerts from the Fermi Gamma-ray Burst Monitor</i>	
	<b>COFFEE BREAK</b>	
<b>Session 4</b>	<b>Brokers (Part 1)</b>	<b>Chair: Giacomo Terreran</b>
3:50 – 4:30 PM	Monika Soraisam (NOAO): <i>Talk and Demo Session on ANTARES</i>	
4:30 – 5:10 PM	Matt Nicholl (U. of Edinburgh): <i>Talk and Demo session on LASAIR</i>	

**TUESDAY, AUGUST 20**

<b>Session 1</b>	<b>Brokers (Part 2)</b>	<b>Chair: Dan Milisavljevic</b>
9:00 – 9:40 AM	Ernesto Castillo (U. of Santiago, Chile): <i>Talk and Demo Session on ALeRCE</i>	
9:40 – 9:55 AM	Meg Schwamb (Queen's University Belfast): <i>The LSST-MPC Connection</i>	
9:55 – 10:35 AM	Rob Seaman (Catalina Sky Survey): <i>NEOfixer &amp; the Catalina Sky Survey: a Broker for Near Earth Asteroids</i>	
	<b>COFFEE BREAK</b>	
10:55 – 11:25 AM	<b>Round Table: Brokers</b> Moderator: Wen-fai Fong (Northwestern)	
	Kate Alexander (Northwestern), Edo Berger (Harvard), Baptiste Ceconi (Observatoire de Paris), Phil Cowperthwaite (Carnegie Observatories)	
<b>Session 2</b>	<b>Open Data Access</b>	<b>Chair: Genevieve Schroeder</b>
11:25 – 11:40 AM	Peter Williams (Center for Astrophysics: Harvard & Smithsonian and American Astronomical Society): <i>The WorldWide Telescope</i>	
11:40 – 12:30 PM	<b>Talks &amp; Demo on LCO TOM</b>	
	Rachel Street (Las Cumbres Observatory): <i>The Astrophysical Events Observatory Network (AEON): science use-cases</i>	
	Tim Lister (Las Cumbres Observatory): <i>Target and Observation Manager (TOM) Systems for Solar System Science</i>	
	Jamison Burke (UC Santa Barbara/Las Cumbres Observatory): <i>Using the TOM Toolkit to Rebuild the Supernova Exchange</i>	
	<b>LUNCH BREAK</b>	
<b>Session 3</b>	<b>Follow-up Resources Part 1</b>	<b>Chair: Wynn Jacobson-Galán</b>
2:00 – 2:20 PM	Ryan Chornock (Ohio U.): <i>Spectroscopic Follow-up</i>	
2:20 – 2:40 PM	Kate Alexander (Northwestern): <i>Radio Breakthroughs: A New Window on the Transient Sky</i>	
2:40 – 3:00 PM	Bryan Miller (Gemini Observatory): <i>Gemini in AEON</i>	
3:00 – 3:15 PM	Cesar Briceno (SOAR/CTIO): <i>The SOAR Telescope in the Astronomical Event Observatory Network</i>	
3:15 – 3:30 PM	Stephen Ridgway (NOAO): <i>Challenges of Telescope Allocation in Time-domain Astronomy</i>	
	<b>COFFEE BREAK</b>	<b>Chair: David Buckley</b>
3:50 – 4:10 PM	Lou Strolger (Space Telescope Science Institute): <i>Policies and Machine-learning Processes which Reduce Bias in the Allocation of Follow-up Resources</i>	

4:10 – 4:25 PM	Daniel Bramich (NYUAD): <i>X-ray Binary New Early Warning System (XB-NEWS)</i>
4:25 – 4:40 PM	Brenna Mockler (UC Santa Cruz): <i>An Energy Inventory of Tidal Disruption Events</i>
4:40 – 5:30 PM	<b>Panel: Spectroscopic &amp; Multi-wavelength Follow-up... Thousands of Alerts per Night</b> <b>Moderator:</b> W. Neil Brandt (Penn State); Deanne Coppejans (Northwestern), Denis Leahy (U. of Calgary), Jeonghee Rho (SETI Institute), Giacomo Terreran (Northwestern), Aaron Tohuvavohu (Penn State), Nikolaus Volgenau (Las Cumbres Observatory)
7:00 PM	<b>Banquet Dinner</b> (optional), The Stained Glass (1735 Benson Ave.)

**WEDNESDAY, AUGUST 21**

<b>Session 1</b>	<b>Follow-up Resources Part 2</b>	<b>Chair: Deanne Coppejans</b>
9:00 – 9:15 AM	Tyler Pritchard (NYU): <i>Extreme Broad-lined Type Ic SNe: Understanding SNe in the Fast Transient Regime</i>	
9:15 – 9:30 AM	Yuhan Yao (Caltech): <i>Supernova Experiments Conducted by the Zwicky Transient Facility (ZTF)</i>	
9:30 – 9:45 AM	Wynn Jacobson-Galán (Northwestern): <i>Constraining Type Ia Progenitor Scenarios Through the Detection of Spectroscopic Helium</i>	
9:45 – 10:00 AM	Tyler Linder (Astronomical Research Institute): <i>Near Earth Asteroid Follow-up and Telescope Automation</i>	
<b>Session 2</b>	<b>Multi-messenger Astrophysics</b>	<b>Chair: Aprajita Hajela</b>
10:00 – 10:30 AM	Christopher Berry (Northwestern): <i>Multi-messenger Astrophysics with Gravitational Waves</i>	
10:30 – 10:45 AM	Kerry Paterson (Northwestern): <i>SAGUARO: Searching the Optical Sky for Gravitational Waves</i>	
	<b>COFFEE BREAK</b>	
11:05 – 11:35 AM	Anna Franckowiak (DESY): <i>Multi-messenger Astronomy with Neutrinos</i>	
11:35 – 11:55 AM	Derek Fox (Penn State): <i>The AMON Network</i>	
11:55 – 12:15 PM	Surabhi Sachdev (Penn State): <i>Early Warning Detection of Gravitational Waves from Binary Neutron Star Coalescences</i>	
12:15 – 12:30 PM	Andy Howell (Las Cumbres Observatory / UCSB): <i>SCiMMA – Scalable Cyberinfrastructure for Multi-Messenger Astronomy</i>	
	<b>LUNCH BREAK</b>	
<b>Session 3</b>	<b>Algorithms, Machine Learning, Astroinformatics (Part 1)</b>	<b>Chair: Niharika Sravan</b>
2:00 – 2:30 PM	Adam Miller (Northwestern): <i>ML in Time Domain Astrophysics</i>	
2:30 – 2:50 PM	Daniel Muthukrishna (U. of Cambridge): <i>RAPID: Early Classification of Explosive Transients using Deep Learning</i>	
2:50 – 3:05 PM	Sebastian Gomez (Harvard): <i>Searching for Superluminous Supernovae in Transient Alert Streams</i>	
3:05 – 3:20 PM	Liam Connor (U. of Amsterdam): <i>Applying Deep Learning to Real-time FRB Classification on ALERT</i>	
	<b>COFFEE BREAK</b>	<b>Chair: Anya Nugent</b>
3:40 – 3:55 PM	Ninah Hernitschek (Caltech): <i>Machine-Learning Strategies for Variable Source Classification</i>	
3:55 – 4:10 PM	Johannes Marais (U. of the Free): <i>Machine Learning Techniques to Classify Transients in the LSST era: a Proof-of-Concept using MeerLICHT</i>	
	<b>DINNER BREAK</b>	
7:30 – 8:30 PM	<b>Public Lecture:</b> Andrew J. Connolly (U. of Washington): <i>Streaming the Universe</i>	

**THURSDAY, AUGUST 22**

<b>Session 1</b>	<b>Algorithms, Machine Learning, Astroinformatics (Part 2)</b>	<b>Chair: Adam Miller</b>
9:00 – 9:30 AM	Antonella Palmese (Fermilab): <i>Time Domain Science with DESI</i>	
9:30 – 9:50 AM	Ashley Villar (Harvard): <i>Light-curve Classification Efforts</i>	
9:50 – 10:10 AM	Adriano Baleschi (Northwestern): <i>Classifying Transients from their Environments</i>	
10:10 – 10:25 AM	V. Zach Golkhou (U. of Washington): <i>GenESIS: A Framework for Time-domain Analysis</i>	
	<b>COFFEE BREAK</b>	
<b>Session 2</b>	<b>Algorithms, Machine Learning, Astroinformatics (Part 3)</b>	<b>Chair: Kerry Paterson</b>
10:45 – 11:05 AM	Griffin Hosseinzadeh (Center for Astrophysics Harvard & Smithsonian): <i>3000 Photometrically Classified Transients from the Pan-STARRS Medium Deep Survey</i>	
11:05 – 11:20 AM	Lucy Fortson (U. of Minnesota): <i>Supporting Transient Surveys with Citizen Science</i>	
11:20 – 11:35 AM	Adam McMaster (Zooniverse, U. of Oxford): <i>Building the Zooniverse into Your Pipeline</i>	
11:35 – 11:50 AM	David Grant (U. of Oxford): <i>Global Jet Watch: a Network of Telescopes for Time-lapse Spectroscopy</i>	
11:50 – 12:00 PM	<b>Concluding Remarks &amp; Group Photo</b>	
	<b>LUNCH BREAK</b>	
2:00 – 5:00 PM	HACK SESSION (optional): <b>Hands-On TOM Toolkit Set-up and Customization Workshop</b>	
2:00 PM	<b>Architecture Boat Tour</b> (optional), Bus Departs (40 Arts Circle Dr.)	

**FRIDAY, AUGUST 23**

9:00 AM – Noon	HACK SESSION (optional): <b>Observing Queues</b>
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