Monday, Mar 20, 2017

Introduction and Overview, Chair: Selma de Mink (U Amsterdam)

8:50am Lars Bildsten (KITP) Welcome
9:00am Vicky Kalogera (Northwestern) Gravitational wave astrophysics for massive stars
9:45am Frank Timmes (Arizona State) A bonanza of frontiers

Morning Break & POSTERS

Transport Processes and Envelopes

11:00am Tamara Rogers (Newcastle) Angular momentum transport by gravity waves
11:30am Matteo Cantiello (Flatiron Inst.) Envelope convection in massive stars and iron opacity
12:00pm Yan Fei Jiang (KITP) MHD simulations of massive star envelopes
12:30pm Lunch Break

Mass Loss, Mass Gain & Mass Transfer, Chair: Jorick Vink (Armagh Observatory)

2:00pm Stan Owocki (Delaware) Theory of stellar winds
2:45pm Eliot Quataert (Berkeley) Late-stage mass loss instabilities in massive stars
3:30pm Afternoon Break & POSTERS

4:00pm Paul Ricker (Illinois) Common-envelope evolution
4:30pm Fabian Schneider (Oxford) Outcomes of massive star mergers
5:00pm Dany Vanbeveren (Brussels) Massive binary puzzles
5:30pm SHUTTLE TO BWSCI

Tuesday, Mar 21, 2017

Asteroseismology, Magnetism & Rapid Rotation, Chair: Anne Thoul (Liege)

9:00am Ehsan Moravveji (KU Leuven) Massive-star asteroseismology
9:30am Daniel Roy Reese (Obs. de Paris) Seismology of rapidly rotating stars
10:00am Gerald Handler (Copernicus) Lessons from BRITE
10:30am Morning Break & POSTERS

11:00am Veronique Petit (Delaware) Observational constraints on B fields in early type stars
11:30am Jim Fuller (KITP/Caltech) Internal magnetic fields in red giants
12:00pm Thomas Rivinius (ESO)  The Be star phenomenon
12:30pm  Lunch Break

Unusual Outcomes & New Events, Chair: Natalia Ivanova (U Alberta)

2:00pm Raffaella Margutti (Northwestern)  Observational evidence for pre-SN instabilities & outbursts
2:30pm Scott Adams (Caltech)  Searching for failed supernovae
3:00pm Mansi Kasliwal (Caltech)  Infrared transients & Gap transients
3:30pm  Afternoon Break & POSTERS

Current and Upcoming Surveys and Their Impact on Massive-Star Science, Chair: Lars Bildsten (KITP)

4:00pm Ben Shappee (Carnegie)  ASAS-SN
4:10pm Todd Boroson (LCO)  Las Cumbres Observatory: A New Resource
4:20pm Mansi Kasliwal (Caltech)  Zwicky Transient Facility
4:30pm Iair Arcavi (UCSB)  BlackGEM
4:40pm Juna Kollmeier (Carnegie)  Mapping the Future: After SDSS-IV
4:50pm Conny Aerts (KU Leuven)  Gaia & TESS
5:00pm Stephen Smartt (QU Belfast)  ATLAS, Pan-STARRS, & ePESSTO
5:10pm  Round table discussion of upcoming surveys
5:30pm  POSTERS & RECEPTION

6:00pm  SPECIAL EVENTS DINNER

8:00pm  SHUTTLE TO BWSCI

Wednesday, Mar 22, 2017

Supernovae I, Chair: Nathan Smith (Arizona State)

9:00am Josh Dolence (LANL)  Overview of core-collapse explosion mechanisms
9:30am Thomas Janka (MPA)  Prospects for explosions in 3D
10:00am Rob Farmer (Arizona State)  Variation in pre-supernova model properties
10:30am  Morning Break & POSTERS

11:00am Stephen Smartt (QU Belfast)  Overview of supernova progenitor evidence
11:30am Maryam Modjaz (NYU)  Stripped envelope supernovae
12:00pm Dan Patnaude (Harvard SAO)  Connecting remnants to explosions and progenitors
12:30pm  Lunch Break

2:00pm  FREE AFTERNOON-Shuttle Available to BWSCI

4:00pm  Evening reception at Las Cumbres Observatory. The shuttle is expected to depart from KITP at 4pm.

Thursday, Mar 23, 2017

Supernovae II, Chair: Elena Pian (INAF, Pisa)

9:00am Dan Kasen (Berkeley)  Models for super-luminous supernovae
9:45am Stan Woosley (UCSC)  Pulsational pair instability supernovae
10:30am          Morning Break & POSTERS

11:00am Ragnhild Lunnan (Caltech) Overview of SLSNe & host galaxy properties
11:30am Paolo Mazzali (LJMU) Dissecting SLSNe & SN Ibc with spectral modelling
12:00pm Frank Tramper (ESO) Observations of very late stage WR stars
12:30pm Lunch Break

Supernovae III, Chair: Kenji Nomoto (Tokyo)

2:00pm Philipp Podsiadlowski (Oxford) Binary interactions and stellar transients
2:45pm Thierry Foglizzo (CEA) The core-collapse angular momentum budget
3:30pm Afternoon Break & POSTERS

4:00pm Ondrej Pejcha (Princeton) Inferring Type IIP explosion energies from light-curve modelling
4:30pm Paul Duffell (Berkeley) Impact of Raleigh-Taylor mixing on Type IIP ejecta and light-curves
5:00pm Iair Arcavi (UCSB) The impossible supernova
5:30pm POSTERS & RECEPTION

6:00pm SPECIAL EVENTS DINNER

8:00pm SHUTTLE TO BWSCI

Friday, Mar 24, 2017

Gravitational Wave Science, Chair: Ilya Mandel (Birmingham)

9:00am Lisa Barsotti (MIT) Expected evolution of advanced LIGO sensitivity
9:45am Duncan Brown (Syracuse) International gravitational wave projects.
10:30am Morning Break & POSTERS

11:00am Pablo Marchant (Northwestern) BH-BH mergers from rotational mixing in tight binaries
11:30am Tassos Fragos (Geneva) What we know about BH spins & masses from BH X-ray binaries
12:00pm Ben Farr (KICP, Chicago) With what accuracy can LIGO obtain spins and angles?
12:30pm Lunch Break

Open Questions & Physical Processes in Massive Stars, Chair: Edward van den Heuvel (U of Amsterdam)

2:00pm Norbert Langer (Bonn) The CSM of massive stars at core collapse
2:45pm Conny Aerts (KU Leuven) A data-driven outlook for the future of massive star research

CONFERENCE END

3:45pm SHUTTLE TO BWSCI*Also available to SB Airport and SB Airbus, Goleta location. (See Registration Desk** before Friday** to sign up.)