Monday, Mar 14, 2022

Session: Stars / Compact Objects, Chair: Kaitlin Kratter (Arizona)

8:50am Lars Bildsten (KITP)  Welcome[Video]
9:00am Roman Rafikov (Cambridge)  Circumbinary disks across different scales[Video][CC]
9:45am Matthew Bate (Exeter)  Stellar Binary Accretion and Evolution[Video][CC]
10:30am  Morning Break

11:00am Selma De Mink (MPA) Sophie Schroder (N. Bohr Institute)  Discussion: Orbital Evolution [Slides][Video][CC][Chat]
11:45am Ondrej Pejcha (Charles U)  Discussion: Missing Physics [Video][CC][Chat]
12:30pm  Lunch break

2:00pm John Tobin (NRAO)  The Characteristics, Origin, and Evolution of Multiplicity in the Protostellar Phase[Video][CC]
2:30pm Meng Sun (Northwestern)  How tides change the orbit of binaries and a new open-source code to model stellar tides[Slides][Video][CC]
3:00pm Pablo Marchant (KU Leuven)  The role of accretion in the formation of gravitational wave sources[Video][CC]
3:30pm  Afternoon break

4:00pm Stefan Kraus (Exeter)  Discussion: Observations [Video][CC]
4:45pm Maxwell Moe (Arizona)  Discussion: Populations [Slides][Video][CC]
5:30pm  Dinner

8:00pm  Shuttle to BWSCI

Tuesday, Mar 15, 2022

Session: SMBHs, Chair: Zoltan Haiman (Columbia)

9:00am Julie Comerford (CU Boulder)  Supermassive Black Hole Binaries, from Galaxy Mergers to Gravitational Waves[Video][CC]
9:45am Tamara Bogdanovic (Georgia Tech)  From Kiloparsec Scales to Merger: Properties of Dual AGNs that Become Gravitational Wave Sources[Video][CC]
10:30am  Morning break

11:00am Alberto Sesana (UNIMIB) Magdalena Siwek (Harvard)  Discussion: Orbital Evolution II[Video][CC]
11:45am Julian Krolik (Johns Hopkins)  Discussion: Missing Physics II[Video][CC]
12:30pm  Lunch break

2:00pm Xin Liu (U Illinois)  Electromagnetic Observations of Binary Supermassive Black Holes: New Opportunities with Large Synoptic Surveys[Slides][Video][CC]
2:30pm K.E. Saavik Ford (BMCC)  Connecting AGN Accretion Disks to Black Hole Binaries at Multiple Scales[Slides][Video][CC]
3:00pm Chris Tiede (NYU)  Simulating binaries in thin disks[Video][CC]
3:30pm  Afternoon break
Wednesday, Mar 16, 2022

Session: Binary Disk Physics, Chair: Dan D’orazio (NBIA)

9:00am Dong Lai (Cornell)  
Disks around Binaries and Binaries in Big Disks[Slides][Video][CC]

9:45am Steve Lubow (STSCI)  
Dynamics of Aligned and Misaligned Circumbinary Disks[Slides][Video][CC]

10:30am  
Morning break

11:00am Sterl Phinney (Caltech)  
Discussion: Observational Tests of Theory [Slides][Video][CC]

11:45am Roger Blandford (Stanford)  
Discussion: Missing Physics III [Video][CC]

12:30pm  
Lunch break

2:00pm Enrico Ramirez-Ruiz (UCSC)  
Accretion Disk Formation in LIGO Black Hole Binaries[Video][CC]

2:30pm Adam Dempsey (LANL)  
What Does It Take To Merge Binary Black Holes in AGN Disks[Slides][Video][CC]

3:00pm Cristiano Longarini (U Milan)  
Simone Ceppi (Univ. of Milan)  
Chasing polar alignment in hierarchical triple systems[Video][CC]

3:30pm  
Afternoon break

4:00pm Hui Li (LANL)  
Barry Mc Kernan (BMCC)  
Discussion: Stellar mass binaries in AGN[Video][CC]

4:45pm Ian Czekala (Penn State)  
Discussion: Observational tests of theory II[Video][CC]

5:30pm  
Cocktail Reception

6:00pm  
Dinner

8:00pm  
Shuttle to BWSCI

Thursday, Mar 17, 2022

Session: Computational and Ongoing Challenges, Chair: Yan Fei Jiang (Flatiron)

9:00am Zhaohuan Zhu (UNLV)  
Grid-based simulations for misaligned circumbinary disks and disk breaking[Video][CC]

9:45am Sasha Tchekhovskoy (Northwestern)  
Simulating how black holes burp and shine[Video][CC]

10:30am  
Morning break

11:00am Laura Blecha (Florida)  
Scott Noble (GSFC)  
Discussion: Connecting different scales[Slides][Video][CC]

11:45am Mark Avara (Cambridge)  
Paul Duffell (Purdue)  
Discussion: Code Comparison Projects[Video][CC]

12:30pm  
Lunch break

2:00pm Mark Avara (Cambridge)  
3D-GRMHD Evolution of Inspiralizing Supermassive Black Hole Binaries[Video][CC]
2:30pm Judit Szulagyi (ETH Zurich)  
Accretion inside circumplanetary disks, the equivalents of BH mini-disks[Video][CC]

3:00pm Philipp Moesta (U Amsterdam)  
Simulating accretion in the inner cavity of circumbinary disks[Video][CC]

3:30pm  
Afternoon break

4:00pm Shane Davis (U Virginia)  
Philipp Moesta (Univ. Amsterdam)  
Discussion: Post processing and Mock Observations[Video][CC]

5:30pm  
Conference end - SHUTTLE TO BWSCI *Also available to SB Airport and SB Airbus, Goleta location. (See Registration Desk BEFORE THURSDAY to sign up.)