

2016 DDA Meeting - Topical Sessions

Topical Session I: Impact of Astrometry on Dynamics: Present and Future

The HST has proved to be important agent of astrometric and proper motion studies leading to new insights into the dynamics of Local Group objects. In the next five years ESA's Gaia mission will yield astrometric precision of 10 μ arcsec for billions of objects from near earth asteroids, to exoplanets, to billions of Milky Way stars. The aim of this special session is to discuss how current and future astrometric surveys will impact dynamical studies of systems on a range of scales. Several other ground based and space based surveys are increasing the precision and size of astrometric and proper motion datasets. These surveys and their impact on dynamics will be discussed. Invited speakers in this session are:

1. Sebastien Lepine (Georgia State U): "*Local stellar kinematics from large astrometric surveys: mapping the Galactic phase-space substructure.*"
2. Siegfried Eggl (IMCCE - Observatoire de Paris): "*Is astrometry enough? Deflection relevant Near Earth Object characterization efforts in Europe.*"
3. Gurtina Besla (University of Arizona): "*HSTPROMO and the Dynamics of the Local Group*"

Topical Session II: Dynamics of disk and ring systems: Planetary to Galactic

The dynamics of self-consistent disk and ring systems has a long and rich history. Typically there are many talks on disks (stellar disks, debris disks) and planetary rings at any DDA meetings and they are grouped into different sessions organized by science topic. The goal of this session is to encourage conversation between the different science areas to enable common themes or collaborations to emerge from the discussions. Invited speakers in this session are:

1. Henrik Latter (University of Cambridge): "*Planetary rings and astrophysical discs*"
2. Alice Quillen (University of Rochester): "*Lifting out of the midplane: Warps, peanuts and streams*"
3. Sarah Loebman (University of Michigan): "*Chemodynamical signatures of radial migration in the Milky Way*"

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