

COMMISSION G1: BINARY AND MULTIPLE STAR SYSTEMS

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PRIMARY TASK:

To foster a worldwide communication and collaboration between astronomers working in the field of binary and multiple stars.

SCIENCE TOPICS:

- full range of observational methods and tools
- structure, kinematics and dynamics of binary/multi systems
- improved models of binaries/multis, stellar atmospheres, structure and evolution
- binary/multi catalogs, databases and interfaces
- accurate book-keeping of the history of the field and its impact on astronomy in general

SCIENCE GOALS:

- Best possible values of fundamental parameters (M, R, L, T)
- Bridge to asteroseismic results, parallaxes, standard candles
- Accurate statistical samples of binary/multi populations
- Improved theories of star formation and evolution
- Study of intrinsic variables in binaries/multis
- Study of circum[primary, secondary, binary] exoplanets
- Determining distances across the Galaxy and to other galaxies

SERVICE/OUTREACH GOALS:

- Foster open, collegial and all-inclusive collaboration
- Participate in resolution work (i.e. resolutions B2 and B3)
- Maintain catalogs and databases of binary/multi systems
- Support and sponsor meetings, conferences and symposia in the field of binary/multiple stars
- Support young scientists, minorities and developing programs

DELIVERABLES:

- Expertise, experience, collegiality in the G1 EB Consortium
- The Spectroscopic Binary Catalog (SB9)
- The Visual Double Star Database
- The Information Bulletin on Variable Stars
- The Bibliography of Close Binaries
- The Double Star Circular
- Modeling codes: PHOEBE, JKTEBOP, ...
- Education and Public Outreach programs

UPCOMING CONFERENCES:

- 4th International Pro-Am Meeting for Binary and Multiple Stars
Barcelona, Spain, Sep 18-20, 2015
- Binary Stars
Cambridge, UK, July 24-30, 2016
- Hotwiring the Transient Universe V
Villanova, PA, Oct 10-15, 2016

TUESDAY, AUG 11, 14:00, ROOM 327



Science Session

- 1430-1445 History of Commission 42 – Trimble (15min)
- 1445-1505 The Final Kepler EB Catalog – Prša (20min)
- 1505-1515 The Visual Double Star Catalogs – Mason (15min)
- 1515-1530 Coordinate System Issues in Binary Star Computations – Kaplan (15min)
- 1600-1620 Direct Distance Estimation applied to Eclipsing Binaries in Star Clusters: Case Study of DS And in NGC 752 – Milone (20min)
- 1620-1635 θ¹ Ori B: a quintuple (sextuple?) system less than 30,000 years old – Allen (15min)
- 1635-1650 Two bright eclipsing binaries in the Orion Trapezium (BM and V1016 Ori) – Costero (15min)
- 1650-1710 Untitled Spectroscopic Topic – Soderblom (20min)
- 1710-1725 The CHARA Array, Interferometry and/or Binary Stars – ten Brummelaar (15min)
- 1725-1755 SB₉ to Gaia – Pourbaix (30min)
- 1755-1810 Double Star work being done with the DCT, the NPOI and/or the end of Commission 54 – van Belle (15min)

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JOIN US! :)

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