

IAU Commission 26, 42 & G1

*Double and Multiple Stars,
Close Binary Stars &
Binary and Multiple Star Systems*

Business Meeting



Welcome!

*Note: Please sign sheet for our official report to the IAU!
(on this, please indicate Commission(s) Membership)*

- Departed double star astronomers
- Report from Commission Presidents
- Commission websites

- Commission 42 Report
- Commission G1 Report

- Science Session



Departed Visual Double Star Astronomers



In memoriam...

Jean Dommaget (1924-2014)

C26 President 1970-3

C26 VP 1967-70

C26 Secretary 1964-7, 1979-82

C26 OC 1964-7, 1973-6, 1982-8



Worked on site selection for ESO, investigated astrometry and dynamics of visual double stars, compiled CCDM (a major contributor to the HIC) from the 1976.5 version of the IDS



In memoriam...



Examined 180,000 stars for duplicity, nearly 28,000 double star measurements, more than 2700 new pairs, more than 80 orbits of pairs

Paul Couteau
(1923-2014)

C26 President 1967-70

C26 VP 1964-7

C26 OC 1970-6, 1985-91

Editor, C26 Circular 1983-93



In memoriam...

Olivier Chesneau (1972-2014)



Michelson Prize (C54) awarded 2012 for
major contributions in stellar astrophysics
with LBI

Pioneering work on (among other things)
Eta Carinae, HD 87643, etc., using
VLTI/MIDI, VLTI/AMBER, CHARA/VEGA



In memoriam...

Alexei Kiselev
(1922-2013)



Major contributor in the area
of relative astrometry with
photography done at Pulkovo
Observatory

C26 OC 1985-91



In memoriam...

Chris Morbey
(1942-2012)



Commission 26 member

Orbits in collaboration with Fletcher,
Batten and others.

Expert designer of instruments working
for DAO and on FUSE.



In memoriam...

J. Murray Fletcher (1940-2012)

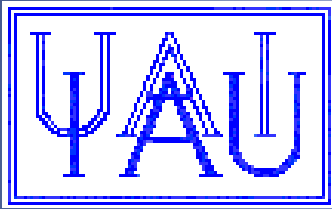


Commission 26 member

Orbits in collaboration with Morbey,
Batten, Irwin and others.

AO work with Walker on Procyon AB.

Expert designer of instruments working
for DAO and on FUSE.



Yuri Balega



- C26 OC 1991-1997
- C26 OC 2006-2012
- C26 VP 2012-2015
- C26 President, 2015-2018



- Speckle Observer
- Director, SAO





Commission Report

Legacy report this triennium.

20 Page Limit per Commission.

Splinter Meeting included.

Historically due before GA.

Due to re-organization, deadline slips.

My Deadline to IAU: 15 October.

Your deadline to me: 30 September.

Expect an email from me by 31 August.



Commission 26 Webpage

The Double Star Library - Mozilla Firefox

The Double Star Library

ad.usno.navy.mil/wds/dsl.html

[0.1 mag] γ Persei [5 km s⁻¹]

ΔV
 ΔB
 ΔU


Welcome to the
Double Star Library

Recent News & Updates:

- 2015 March: link to latest Commission 26 Double Star Circular added

Jump to:

[Purpose of the Library](#) | [IAU Commission 26](#) | [Observing](#) | [Meetings](#) | [Bibliography](#) | [Catalogs](#) | [Links](#) | [Feedback](#)

 IAU Commission 26: Binary and Multiple Stars
(Etoiles Doubles et Multiples)

- [Commission Membership and Officers](#)
 - [Previous Commission 26 officers](#)
- [Commission Mission Statement, Reports, etc.](#)
 - [Commission 26 mission statement](#)

<http://ad.usno.navy.mil/wds/dsl.html>

It is not anticipated that this will go away in the near term but will serve as a repository of historical Commission 26 information.



Commission G1 Webpage

<http://ad.usno.navy.mil/wds/bsl/>

Commission 42 webpage format adopted.

Hosted at same institution as C26 webpage.

Includes information from Commission 26 webpage plus that provided by Commission 42.



Commission Website

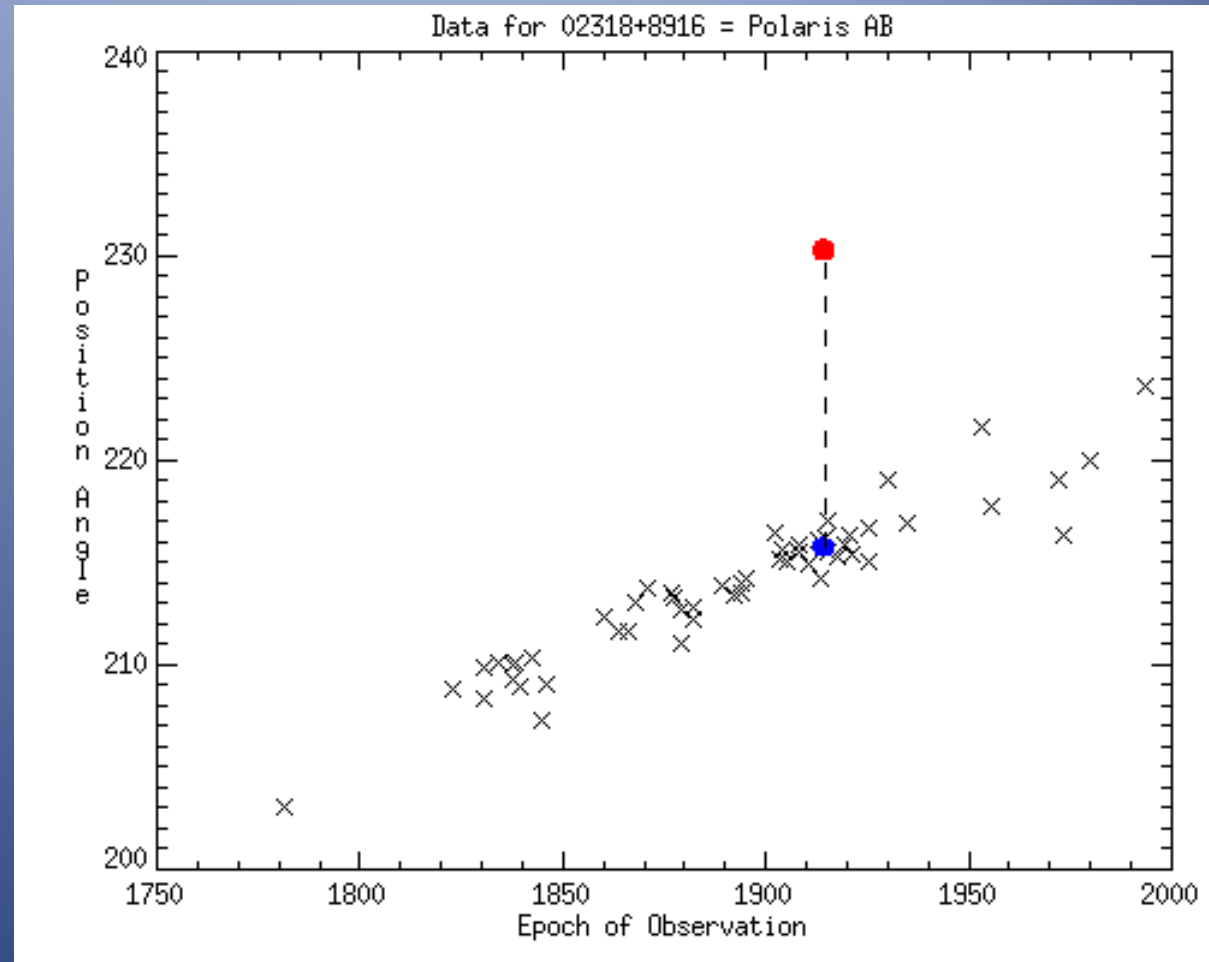
<http://ad.usno.navy.mil/wds/bsl/>

- Mission Statement
- Terms of Reference
- Membership Lists
- Commission Reports
- Working Groups
- Associate Members
- Publications
- Conferences of Interest
- Catalogs, Databases, Codes
- What else should we have?



Continuing Resolution Work

Publish data
as is on
observation
date or
precess to a
common
epoch?





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 θ^1 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)



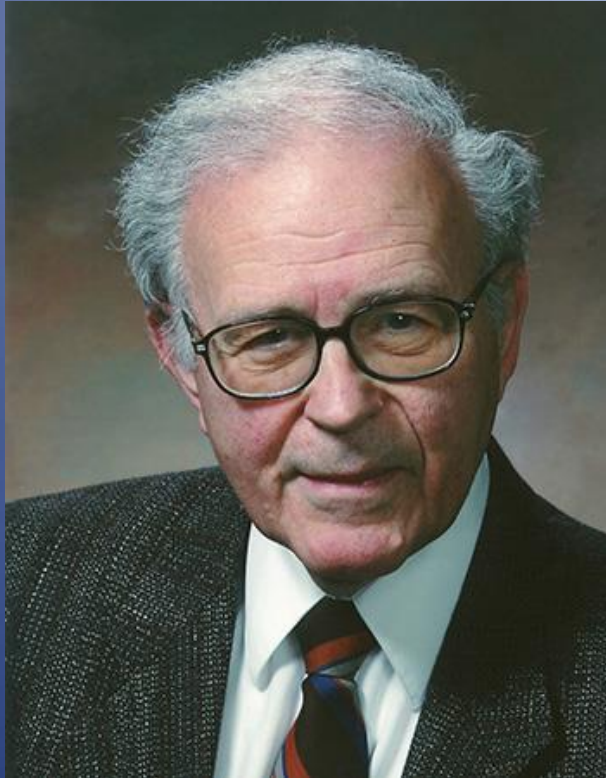
Bonus Slides



Departed Close Binary Star Astronomers



In memoriam...



Robert (Bob) Kraft
(1927-2015)

Influential contributions to
study of variable stars.
Demonstrated that dwarf
novae were close binaries
and were linked to their
evolution.

AAS President 1974-6

Director, Lick Observatory 1981-99

IAU President 1997-2000



In memoriam...



Tibor Herczeg
(1926-2014)

Research on double & multiple stars, close binaries and stellar evolution.

C42 President 1973-6
Editor, Bibliography of
Close Binaries, 1983-8



In memoriam...

Mikhail Lavrov
(1972-2014)

Commission 42 member active in
the observation and analysis of
eclipsing and spectroscopic
binaries.

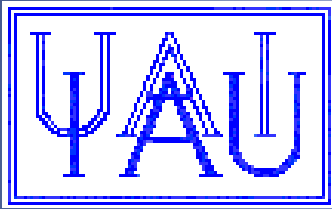


In memoriam...



Runqian Huang
(1933-2013)

Commission 42 member
active in stellar evolution,
colliding winds, non-
conservative binary evolution
and evolution of rotating
binaries.



G1 Demographics

- Faced with the prospect of too many Commissions for Division G, Commission 26 and 42 were encouraged to merge.

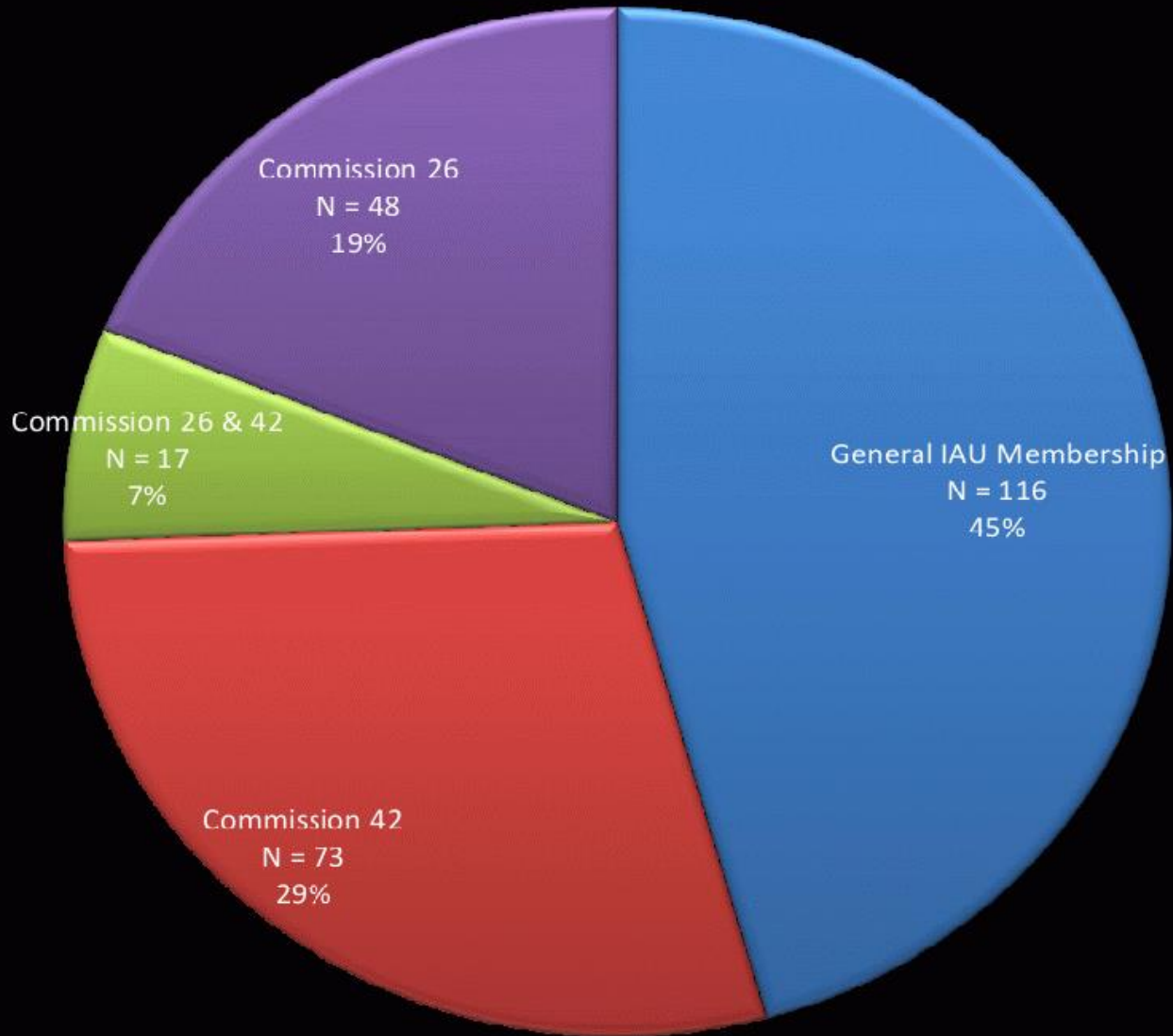
Commission 26 (Double and Multiple Stars)

+ Commission 42 (Close Binary Stars)

= Commission C.G1 (Binary and Multiple Systems)

- Working Groups and Publications of each Commission transition to new Commission
- Single website established.
- Commission merger conducted in the same manner as the successful Commission 8 & 24 merger.
- This did not happen.

Source of Commission G1 Membership





Commission G1 New Officers

- President: Andrej Prša
- Vice President: Virginia Trimble
- Organizing Committee:
 - Robert D. Mathieu
 - Terry Oswalt
 - John Southworth
 - Christopher Adam Tout
 - Tomaž Zwitter
 - Brian Mason