

GaiaNIR: next astrometric mission

Wednesday, 17 January 2024 - Thursday, 18 January 2024

Bologna, OAS

Scientific Programme

Gaia-NIR: next generation astrometric mission. Gathering the interest of the Italian Community
Bologna, 17-18 January 2024
17 January 2024
Introduction

Chairperson: G. Clementini

9.30-9.35 **A. Bragaglia**: Welcome
9.35-9.45 **A. Vallenari**: Goal of the meeting
9.45-10:30 **D. Hobbs**: The GaiaNIR mission: Future Space Astrometry in the Near Infrared
Interstellar medium and Young stellar populations

Chairperson: A. Bragaglia

10.30-10.50 **S. Molinari**: The structure and dynamics of ISM: spiral arms, molecular clouds and the earliest formation of stellar clusters
10.50-11.10 **L. Prisinzano**: Low-mass young stellar populations in the Milky Way: the next frontier with Gaia NIR

Coffee break 11:10-11.40

11.40-12:00 **G. Sacco**: Unveiling the initial stages of star formation with Gaia-NIR
12.00-12:20 **M. Guarcello**: The young supermassive star clusters: an opportunity to study stars and planets formation in starburst
12:20-12:35 **E. Fiorellino**: Gaia Fireworks: the impact of Gaia on Eruptive Accretion and the crucial role of NIR-Gaia
Stellar Variability

Chairperson: T. Muraveva

12:35-12:55 **M. Marconi**: Cepheids and RR Lyrae in the Gaia-NIR perspective
12:55-13:10 **V. Bozza**: Microlensing with exquisite astrometry
13:10-13:25 **G. Iorio**: The RR Lyrae in the disc as an interesting GAIA NIR scientific case

13:25-14:45 Lunch

Exoplanets

Chairperson: M. Lattanzi

14:45-15:05 **A. Sozzetti**: Exoplanet demographics
15:05-15:25 **A. Bonomo** : Characterization and occurrence rate of Jupiter and Saturn analogs to assess their impact on the formation of small and terrestrial inner planets. The crucial role of Gaia-NIR
15:25-15:45 **V. Nascimbeni** : synergies with space-based transit surveys
15:45-16:00 **S. Desidera**: Unveiling free-floating binary planets with Gaia-NIR astrometry
16:00-16:15 **D. Barbato**: A new golden age for the proper motion anomaly technique with Gaia-NIR

16:15-16:45 coffee break

Chairperson: A. Garofalo

16:45-17:00 **M. Pinamonti:** Characterizing long-period exoplanets with radial velocities and present and future high-precision astrometry
The Galaxy

17:00-17:20 **G. Bono:** GaiaNIR: a pathway to the dark side of the Milky Way

17:20-17:40 **L. Magrini:** Towards the innermost boundaries of the Galactic disc

17:40-18:00 **M. Bellazzini:** The photometric heritage of Gaia mission

18 January 2024

Gaia-NIR Synergies

Chairperson: A. Sozzetti

09:30-10:10 **D. Hobbs & A. Vallenari :** Discussion: Next steps & Actions

10:10-10:30 **R. Drimmel:** Revealing the disc of the Milky Way with Gaia NIR

10:30-10:50 **D. Massari:** Euclid Early Release Observations - first results on Milky Way globular clusters

10:50-11:20 coffee break

Chairperson: A. Vallenari

11:20-11:40 **F. Annibali:** Synergies with JWST/WFIRST

11:40-12:00: **G. Clementini:** Synergies with LSST

12:00-12:20: **M. Crosta:** The Gaia legacy: Gravitation and multi-messenger astronomy with Gaia NIR

12:00-12:40 **D. Busonero:** From Gaia to GaiaNIR