

# Expected breakthroughs in the field of “Stars, stellar populations and interstellar medium”

*Wednesday 5 June 2024 09:00 (25 minutes)*

At INAF the research in the field of “Stars, stellar populations and interstellar medium” is included in the scientific national group 2 (Raggruppamento Scientifico Nazionale 2, RSN2).

The INAF community holds an internationally relevant position in the field of stellar astrophysics, playing a leading role from theoretical, observational, and experimental perspectives.

The variety of topics covered includes the study of star and planetary formation, interstellar medium, extrasolar planetary systems, stellar evolution, stellar populations in the Milky Way and in resolved external galaxies, the Galaxy as a whole, the nearby Universe, and the determination of cosmic distances.

The wide range of spatial scales involved requires diverse methodologies, a multi-disciplinary approach including increasingly advanced algorithms and data analysis techniques, and synergies between ground and space multiwavelength observations.

Today, INAF has access to the most sophisticated instruments and holds many leadership roles, conducting research of excellence with innovative methodologies and obtaining results of great impact.

In this talk, I will review some of the main activities the RSN2 community is involved in and outline the expected breakthroughs.

## **sessioni congresso**

Stelle, popolazioni stellari e mezzo interstellare

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