



# Systems Engineer (Dwingeloo)

## Job description:

Together with your team, you will be responsible for the technical organization and control of a scientifically and technologically innovative and complex astronomical instrument (METIS: Mid-Infrared ELT Imager and Spectroscope) on the world's largest optical telescope (ESO's Extremely Large Telescope- ELT). Developing this instrument for the ELT is a project that is being realized by a consortium of research institutes in several European countries, under the leadership of the Dutch Research School for Astronomy (NOVA). You will be part of this interdisciplinary, international consortium.

Your duties and responsibilities consist of:

- Participating in the realization and control of the METIS instrument technical baseline
- Co-chairing the System Team and activities across the project
- Facilitating technical issue resolution between team members, coordinates with project management
- Assists with the customer and international teams on technical aspects of the instrument
- Leading and/or coordinating the definition and development of:
  - System architecture and overall design
  - System and subsystem requirements
  - Requirements traceability, tracking, verification, validation and verification matrix
  - Instrument interfaces, both within the instrument and to the telescope
  - Instrument performance analysis
  - Technical risks
- Tracking and managing technical resource, error and tolerance budgets and technical performance measures for the instrument
- Leading system trade studies while working with system team members to identify and target specific development areas that require additional scrutiny and oversight
- Participating in regular project, system and subsystem reviews
- Participating with METIS Project Office (MPO), Risk Management Board and Configuration Control Board
- Regular travel between the main METIS locations is expected (Dwingeloo and Leiden, The Netherlands) as well as travel to international partners (mainly within Europe)

## Job requirements:

- At least 10+ years relevant experience in systems engineering
- Experience with optical and infrared instruments (also cryogenics is strongly desired)
- Experience in leading and working in teams of multidisciplinary-multinational engineers and scientists
- Proficient oral, written and interpersonal communications skills
- A master's degree in engineering, physics, astronomy or equivalent experience
- INCOSE CSEP certification is desirable but not required

## Location:

The location for this job is the NOVA Optical Infrared Instrumentation group at ASTRON in Dwingeloo.