



Instrumentation physicist/engineer for the METIS/ELT project

Applications are invited for a physicist / instrumentalist / engineering position in the group of Prof. Dr. Lucas Labadie at the 1st Physics Institute of the University of Cologne, Germany. Our institute is strongly involved in international projects for astrophysics (VLT/I, LBT, ELT, JWST, ALMA, Herschel).

The project: Our institute contributes to the instrumentation program of the 39-m European Extremely Large Telescope (E-ELT) and more particularly to the construction of the first-light instrument METIS, the mid-infrared imager and spectrograph. METIS is constructed by a consortium of European institutions including the University of Cologne. The project is currently going through the PDR phase and will see its first light around 2028. Our involvement in METIS is motivated by the unique science opportunities offered in several fields of astrophysics. In this context, the 1st Physics Institute is responsible since 2016 for the design, procurement, manufacturing and integration of the Warm Calibration Unit (WCU).

The role: The successful applicant will take the role of 'system lead' of the WCU and be in regular contact by videocon and face-to-face meetings with the system leads of the other subsystems of METIS. The task of the successful applicant will strongly focus on the **final design** of the WCU, which includes the phases of detailed optical, mechanical, thermal and electrical design, AIV preparation and laboratory prototyping. He/She will actively contribute to the writing of the documentation. Well inserted in the local team at the University of Cologne, the present position offers a unique opportunity to join an international team that will bring METIS into successful operations and science.

The candidate: He/She should hold a Master's or PhD degree in experimental physics, engineering or related discipline, and have ideally experience in the development of astronomical instrumentation. A strong asset would be the knowledge of physics design software such as Zemax, Comsol, Ansys, Creo, or Autodesk. Experience with Matlab, IDL or Python is expected too. The working language is English. Regular traveling in Europe for consortium meetings is requested.

Conditions: The position is funded for an initial period of 1 year starting at earliest convenience, with a possible renewal for additional three years in July 2020 once the next third-party funding application is successful.

The salary is based on the E13 scale of German civil service. Applicants should send a CV and a brief statement of activity to labadie@ph1.uni-koeln.de. They should arrange the email addresses of two referees that can be contacted directly. Further inquiries can be made at the same address. The deadline for submission is **April 30th 2019** and applications will be reviewed until the position is filled. The University of Cologne is an equal opportunity employer in accordance with German laws. Women, minorities and persons with disabilities are strongly encouraged to apply. For further information, please visit <https://astro.uni-koeln.de/labadie.html>, <http://metis.strw.leidenuniv.nl/> or <https://astro.uni-koeln.de/17364.html>

