

Open position – Adaptive Optics at Arcetri Observatory



<u>Arcetri Observatory</u> Adaptive Optics group* (<u>INAF</u>) is ready to open a new position for a graduate in physics, mathematics, engineering or related disciplines. The successful candidate will carry out research activities within the project MAORY**, and, in particular, he/she will focus on numerical simulations to support design and optimization of the Adaptive Optics module.

The essential competencies are:

- Control system design
- Numerical simulation
- Signal processing

- Propagation of uncertainty
- Object-oriented programming
- GPGPU programming

If you are interested please contact

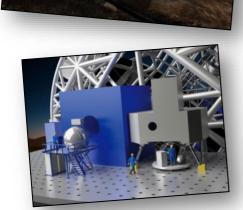
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Other open positions at http://aowiki.arcetri.astro.it/Public/JobOffers

*Arcetri observatory Adaptive Optics Group consists of 16 people divided among technicians, researchers, doctoral students and postdocs most of whom graduated in physics or engineering. This group is part of the ADaptive Optics NatIonal laboratory (ADONI) and it has a 30-year experience in Adaptive Optics systems development. Currently, in addition to MAORY, it is involved in international projects like the First Light Adaptive Optics (FLAO), <u>SOUL</u> and <u>ARGOS</u> systems for the Large Binocular Telescope (LBT), and ERIS instrument for the Very Large Telescope (VLT).







**<u>MAORY</u>, a post focal multi-conjugate Adaptive Optics module, is one of the first light instruments of the European Southern Observatory (<u>ESO</u>) Extremely Large telescope (<u>ELT</u>) – the world's largest optical/near-infrared telescope now under construction. MAORY will give a uniform correction on the field of view of the Multi-AO Imaging Camera for Deep Observations (<u>MICADO</u>), and it comprises several large mirrors (diam. ~1m) including 1 or 2 deformable mirrors with ~1000actuators, 12 Shack-Hartmann wave-front sensors, and a real time computer with low latency (<1ms) and jitter (<<1ms) and a computing power of some TFLOPs. This project is developed by an international consortium led by INAF with a cost of 18M€ and installation at the telescope scheduled for 2025.