

MONTHLY NEWSLETTER



INAF Osservatorio Astrofisico di Arcetri

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HIGHLIGHT

Selected the first 15 community Surveys for 4MOST

The European Southern Observatory (ESO) has selected 15 observing programs for 4MOST, a new spectrograph that will be mounted at the focus of the VISTA telescope (in Chile, image below). 4MOST is a new and advanced facility fiber-fed for spectroscopic surveys that will be able to simultaneously obtain the spectra of approximately 2400 objects on a hexagonal field of view of 4.2 square degrees. Among the 15 approved proposals, 3 are led by INAF.

The galactic survey "**The 4MOST Survey of Young Stars**" (**4SYS**) is led by INAF-Osservatorio Astrofisico di Arcetri. With this survey, about 100,000 young stars will be observed at a distance of no more than 500 parsec. The data derived from these observations will allow us to better understand how star clusters form and disperse.

PI: Germano Sacco, Co-I: Davide Fedele, Elena Franciosini, Laura Magrini, Sofia Randich.

Further INAF-OAA participations in selected surveys for 4MOST

4MOST-StePS: a Stellar Population Survey using 4MOST

(PI: A. Iovino), including Anna Gallazzi and Stefano Zibetti (core team), Francesco Belfiore, Giovanni Cresci, Filippo Mannucci.

4MOST survey of dwarf galaxies and their stellar streams (**4DWARFS**)

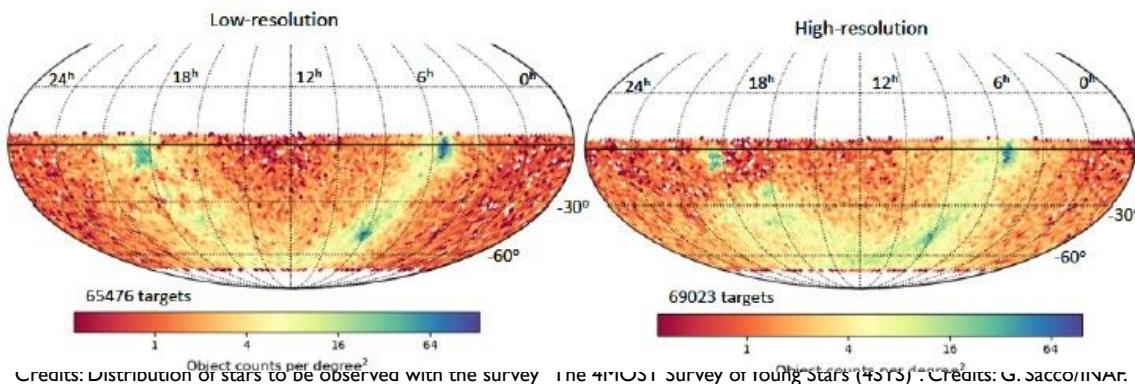
PI: A. Skuladottir, including Viola Gelli, Stefania Salvadori, Martina Rossi.

4HS: the 4MOST Hemisphere Survey of the Nearby Universe

(PI: Edward Taylor), including Leslie Hunt (core team)

4GRoundS

(PI: R. Ibata), including A. Skuladottir



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Astrophysical Journal, in press

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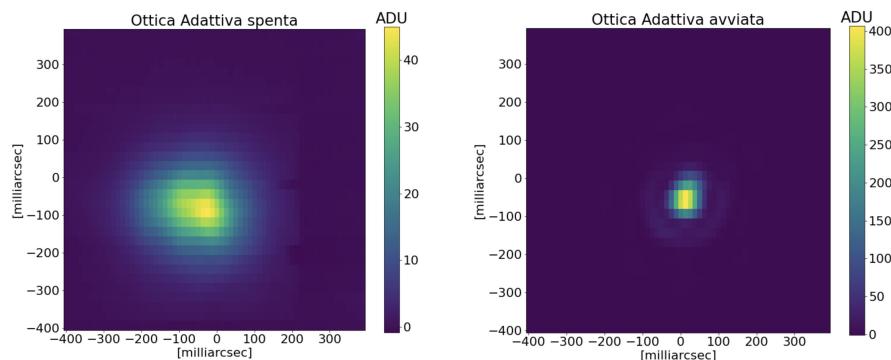
Astronomy & Astrophysics, in press

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TECHNOLOGICAL MILESTONES

The first light of the Adaptive Optics system of the ERIS instrument

On February 13rd, the ERIS instrument's Adaptive Optics system achieved its first light at ESO's Very Large Telescope (Cerro Paranal, Chile). Below (left panel), the images of HD101452 observed at 2.2 microns affected by the seeing (turbulence of our atmosphere); the right panel shows how the Adaptive Optics system corrects the effects of turbulence in real time.



Team INAF-OAA: (responsible for the ERIS Adaptive Optics system): Co-PI: S. Esposito; AO System Engineer: A. Riccardi; Software and Assembly, Integration and Verification: A. Puglisi, P. Grani; Assembly, Integration and Verification: R. Briguglio, M. Bonaglia, L. Carbonaro; Data analysis: G. Agapito; Science Committee: F. Mannucci, G. Cresci.