SUNDIAL: A new EU-funded network combining astronomy and computer science

R. F. Peletier, J. H. Knapen, G. Longo, et al.

E-mail peletier@astro.rug.nl, jhk@iac.es, longo@na.infn.it

RONOMY COMPUTER SCIENCE

A new $\mathsf{ITN}-\mathsf{SUNDIAL}$ (SUrvey Network for Deep Imaging Analysis and Learning) has just been approved by the European Union as a new Innovative Training Network. We will hire 14 PhD students to be trained through research on the interface between astronomy and computer science, focussing on techniques of automated learning from large quantities of data to answer fundamental questions on the evolution of properties of galaxies. In particular, we will develop techniques to detect and classify ultra-faint galaxies and galaxy remnants in a deep survey of the Fornax cluster, and use the results to study how galaxies evolve in the dense environment of galaxy clusters. With a team of young researchers we will develop novel computer science algorithms addressing fundamental topics in galaxy formation, such as the huge dark matter fractions inferred by theory, and the lack of detected angular momentum in galaxies.

HIRING SOON — We will advertise to fill 14 posts across our network in the autumn, for a start date of September 2017. We will offer competitive, EU-level, conditions for three-year contracts to PhD students from across the world.

The following positions will be available:

Computer Science: Univ. of Groningen, Netherlands (3), ESIEE,

Paris, France (1), Univ. of Birmingham, UK (2)

Astronomy: Univ. of Groningen, Netherlands (1), IAC, Tenerife, Spain (1), Univ. of Naples, Italy (1), Obs. Naples, Italy (1), Univ. of Oulu, Finland (1), Univ. of Gent, Belgium (2), Univ. of Heidelberg, Germany (1).

Positions will be advertised widely but please ask interested candidates to contact us already at this stage.



SUNDIAL H2020 Innovative Training Network





