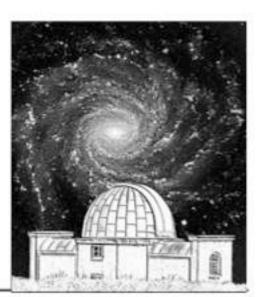
## Universität Basel Departement Physik





www.physik.unibas.ch

In the group of Prof. Bruno Binggeli a

## PhD Position in Observational Extragalactic Astronomy

is available starting 1 June 2012 or later, for a duration of 3 to 4 years.

The position is funded by the Swiss NF and is part of a research project entitled "Near-field cosmology with Southern Group Dwarf Galaxies". The purpose is to conduct a search for faint, hitherto undetected dwarf galaxy members of the nearby southern groups in Sculptor and Centaurus, based on dedicated observations with the wide-field camera of the new SkyMapper telescope of the Australian National University at Siding Spring Observatory, in close collaboration with Dr. H. Jerjen of ANU at Canberra. Publicly available NIR images from ESO's VHS survey will be used in parallel. The work will involve the data reduction of deep CCD frames, the application of specialized data mining techniques to search for extended low-surface brightness objects, as well as multicolor surface photometry and light profile modelling for the new and previously known dwarf members of the groups. The ultimate goal of the project is to contribute to the mapping of the local extragalactic universe and to provide further observational input for our understanding of galaxy formation and evolution in a cosmological context, and the dark matter problem in particular.

The successful applicant is formally required to have a Master degree in physics, astronomy, or equivalent. He or she is expected to be strongly interested in observational astronomy and to have some basic knowledge in data handling and programming.

Applications should include a Curriculum Vitae, a letter of motivation (in German or English), the title, abstract, and grade of the Master thesis (in any language), and the contact information for two references. Applications should be sent by email not later than 15 May 2012 to

Prof. Bruno Binggeli: bruno.binggeli@unibas.ch

who can also be contacted for further information on the project.