SYMPOSIUM ON RELATIVITY, MATTER AND COSMOLOGY

11–14 July 2005, Bern, Switzerland

The EPS-ESA-ESO-CERN Symposium on 'Relativity, Matter and Cosmology', will take place from July 11 to 14, 2005 at the University of Bern. The Symposium will be part of the centenary celebrations of Albert Einstein's *annus mirabilis* and take place in the framework of the 13th General Conference of the European Physical Society, EPS13, under the general title 'Beyond Einstein – Physics for the 21st Century'. The EPS-ESA-ESO-CERN Symposium 2005 is expected to become one of the highlights of the 'World Year of Physics 2005', also declared the 'International Year of Physics' by the United Nations.

Plenary speakers will introduce the topics, and ample time and space will be provided for contributed papers and posters describing original work, preferably by young scientists.

Plenary Speakers in the EPS-ESA-ESO-CERN Symposium on 'Relativity, Matter and Cosmology' will include K. Danzmann, G. Drexlin, G. Efstathiou, J. Engelen, C. W. F. Everitt, E. Fiorini, W. Gelletley, F. Iachello, V. M. Kaspi, G. Ross, B. F. Schutz, J. Silk, D. Spergel, J. Stachel, and F. Wagner.

The following Sessions for contributed papers and posters are foreseen:

- The Fundamental Laws of Physics and the Constancy of Fundamental Constants
- Tests of Gravitational Theory and General Relativity
- Quantum Gravity
- Dark Energy
- Gravitational Waves
- String Theory and Extra Dimensions
- The Standard Model and Beyond
- LHC Physics and the Origin of Mass
- Neutrino Oscillations and Masses
- Matter in Extreme Conditions
- Dark Matter
- The Early Universe
- Cosmological Parameters
- Matter in the Universe
- Supernovae in Cosmology

EPS13 comprises two other co-located Conferences, one on 'Photons, Lasers and Quantum Statistics' and another one on 'Brownian Motion, Complex Systems and Physics in Biology'. It is anticipated that each one of these Conferences will attract about 300 physicists and astronomers, not only from Europe, but also from other continents. Registration for EPS13 will give access to all three conferences, which will be run in parallel and in close proximity to each other.

Further information can be found at *http://www.eps13.org*

ESO Workshop on

MULTIPLE STARS ACROSS THE H-R DIAGRAM

12–15 July 2005, ESO Headquarters, Garching, Germany

Multiple (i.e. triple, and higher order) stellar systems comprise a significant fraction of stellar populations. Their role in stellar physics has not yet been fully recognized. Stars of some specific types can originate only in multiple systems. An interplay between tides, nuclear evolution and dynamics is a rich field of contemporary research. The growing observational data on multiple systems with a variety of characteristics is used to critically examine the assumptions underlying stellar evolutionary models.

The main aim of the workshop is to bring together observers using different techniques (e.g. spectroscopy, high angular resolution imaging), from X-rays to far-IR, on ground-based single telescopes or interferometers, and on space observatories. The combination of techniques is vital for comprehensive studies of multiple stars that span a wide range of angular separations and stellar types.

The current state of observational and theoretical knowledge will be reviewed. Priorities for future studies will be identified, so as to provide the necessary input for further progress in the understanding of the genesis of multiple stars, their structure and their role for the study of stellar evolution.

The format of the meeting will consist of invited talks, contributed talks and posters.

SOC members: J. Bouvier, L. M. Close, P. P. Eggleton, R. F. Griffin, W. I. Hartkopf, S. Hubrig (co-chair), Ch. Leinert, M. Petr-Gotzens, M. Sterzik, A. Tokovinin (co-chair), S. Udry

LOC members: Ch. Stoffer, P. Bristow, A. Kellerer, M. Petr-Gotzens

Full details and registration information can be retrieved from *http://www.eso.org/gen-fac/meetings/ms2005/* or by e-mail to *ms2005@eso.org*

Deadline for registration: 30 April 2005