## EP 9 Neutrino-Astrophysik

Zeit: Montag 14:00–14:45 Raum: TU BH349

Hauptvortrag

EP 9.1 Mo 14:00 TU BH349

ANTARES: A Neutrino Telescope in the Deep Sea —  $\bullet JOHN$  Carr — Centre de Physiques des Particules de Marseille, IN2P3/CNRS, Marseille, France

The ANTARES Neutrino telescope is being constructed at a site off the south coast of France in the Mediterranean Sea at a depth of 2400m. The detector is planned for completion early in 2007 and is being constructed by an international collaboration including institutes from France, Germany, Italy, Netherlands, Russia and Spain. Various test lines have already been operated on the site and during 2005 the first complete detector lines will be deployed and operated.

The presentation will describe the scientific objectives of the project which include searches for the sources of cosmic rays in the galaxy as well as for searches for dark matter.

Details of the technological choices and challenges for the ANTARES detector will be given, together with comparisons with existing neutrino telescopes.