ABSTRACT ONLY

HIGH-ENERGY ASTROPHYSICS IN CHILE

Andreas Reisenegger[1]

Our NS/MHD (Neutron Star/Magneto-Hydrodynamics) group in Santiago studies various aspects of neutron star astrophysics, involving both theory and observations. This work encompasses, among others, their thermal evolution, including internal reheating processes, which is modeled and contrasted with Hubble Space Telescope observations, as well as the evolution of the magnetic field from magnetars to millisecond pulsars. We are also leading the participation of 7 Chilean universities in the planned international *Cherenkov Telescope Array* (CTA), by far the most powerful high-energy (TeV) gamma-ray observatory in the world, to be placed in the next few years near Antofagasta (Chile) and on La Palma (Canary Islands, Spain).

[1] Instituto de Astrofísica, Facultad de Física, Pontificia Universidad Católica de Chile, Santiago, Chile (areisene@astro.puc.cl).