

ESF Exploratory Workshop on How to Constrain the High Density Symmetry Energy

(To be held in Zagreb, Croatia from 16nd to 18^h of October 2009)

Convenor of the Workshop:

Zoran BASRAK, senior scientist, head of laboratory and project leader,
basrak@irb.hr

Address:

Ruđer Bošković Institute, Division of Experimental Physics, Nuclear
Physics Laboratory, P.O.Box 180, HR-10002 Zagreb, Croatia
Tel: +385 1 456 1169 / (1138 secretary), Fax: +385 1 468 0239

Keywords: symmetry energy, nuclear equation-of-state, astrophysics, neutron stars, supernova explosion

Abstract

Understanding compact star properties and the dynamics of supernova explosions essentially relies on our knowledge of the nuclear equation of state (EOS). The contemporary insight into the EOS is limited largely due to our poor knowledge of the density dependence of the nuclear symmetry energy. We believe that an international project should be launched aiming at further constraining the value of the symmetry energy at high densities.