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**Progetto Speciale Multiasse "La Società della Conoscenza in Abruzzo"**  
**PO FSE Abruzzo 2007-2013**  
**Piano degli Interventi 2009-2010-2011**

## CFA LECTURE SERIES

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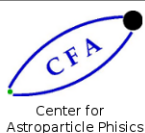
# Neutrino-nucleon cross-sections at energies of Megaton-scale detectors

The problem of neutrino mass hierarchy may be solved using such future underice and underwater megaton-scale detectors as PINGU and ORCA. In my lectures I plan to present the basic ideas concerning neutrino properties and their manifestations in these experiments and to discuss the role of an accurate account for the neutrino-nucleon cross-sections at energies from 5 GeV to 100 GeV. The basic ideas and uncertainties in calculations both at low and at extremely high energies will be discussed.

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**PART 1 - JUNE 22, 2015 - H 2:30 PM - "B. ROSSI" ROOM**

**PART 2 - JUNE 24, 2015 - H 2:30 PM - "E. MAJORANA" ROOM**



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