Contribution ID: **57**   Type: **Poster**

Tools and Methods for simulation and evaluation of Very Large Volume Cherenkov Neutrino detectors

Thursday, 6 May 2010 10:00 (1 minute)

We report on the structure and performance of the HOU Reconstruction & Simulation (HOURS)
software package developed in order to study in detail the response of very large volume
(km^3-scale) Cherenkov neutrino detectors.
HOURS comprises a realistic simulation package of the
detector response, including an accurate description of all the
relevant physical processes, as well as several analysis strategies for event reconstruction.
We also present results concerning the performance of
several detector configurations of a Very Large Volume Cherenkov Neutrino detector.
Our results refer to the evaluation of the detector sensitivity in observing cosmic neutrino fluxes
from point-like and diffuse neutrino sources.

Please indicate "poster" or "plenary" session. Final decision will be made by session coordinators.

plenary

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