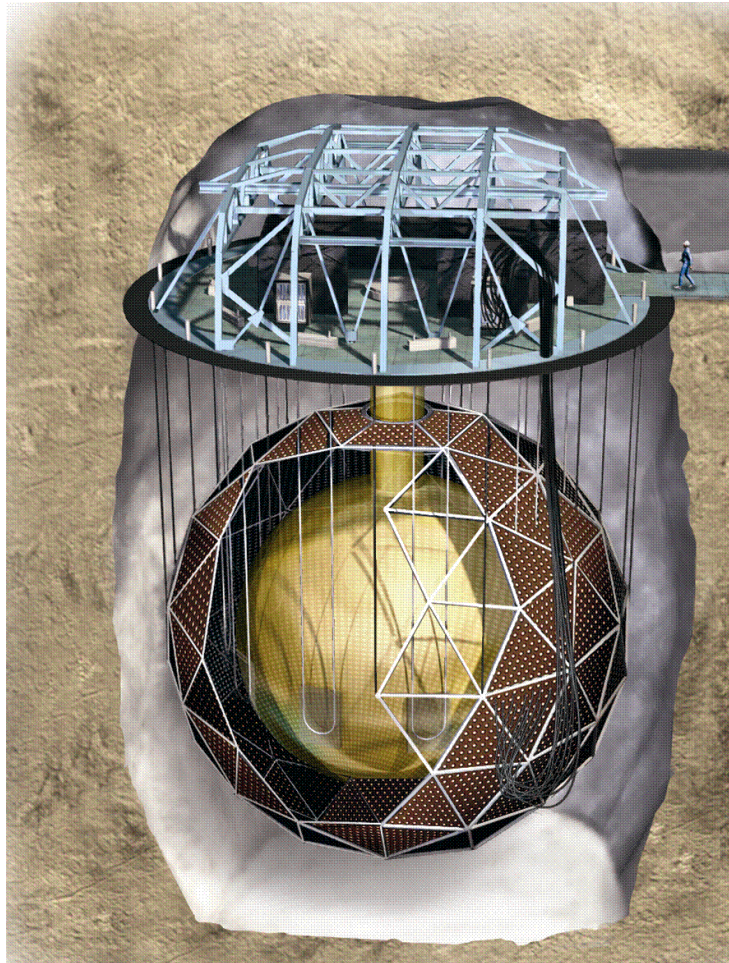


Encontros do IDL

Geoneutrinos, probes of the Earth's interior

Sofia Andringa, LIP (Laboratório de Instrumentação e Física Experimental de Partículas)

13th April 13:00 – Biblioteca do IDL (room 1.1.36)



Neutrinos are elementary particles produced in beta decays, that can cross the all Earth undisturbed, allowing a measurement of the global amount of uranium and thorium in the planet and new constraints on the radiogenic heat flow. The geoneutrino fluxes have been measured by two different experiments to be of the order of $10/m^2/s$, generically consistent with the model expectations, and new experiments are planned for different locations allowing for further model testing. This is a new area that started only in 2005, the existing results and plans will be presented and discussed.



INSTITUTO
DOM LUIZ