



ID de Contribution: 74

Type: **Ordinary**

## **Systematic Uncertainties in Reactor Antineutrino Fluxes and Anomaly**

*dimanche 15 mars 2015 10:45 (20 minutes)*

In this talk I will discuss the origin of the reactor neutrino anomaly, the physics issues involved, and the uncertainties. Since the suggestion of an anomaly, a second puzzle has arisen with the reactor antineutrino spectra, namely the appearance of a shoulder in the spectra measured at Daya Bay, RENO, and Double Chooz. The shoulder is predicted within some nuclear database analyses, but these nuclear databases lack the accuracy to make definitive predictions. Thus, there is a clear need for new short baseline reactor neutrino experiments. I will examine the expected signals from these different experiments and the effect of differences in the hardness of the neutron spectrum on the expected shape of the antineutrino flux.

**Auteur principal:** Dr HAYES, Anna (Los Alamos National Lab)

**Orateur:** Dr HAYES, Anna (Los Alamos National Lab)

**Classification de Session:** Neutrino Physics

**Classification de thématique:** Theory