



Contribution ID: 29

Type: **not specified**

n-TOF operation in 2009

Friday, 6 March 2009 10:00 (30 minutes)

The neutron Time of Flight (n_TOF) facility at CERN is a source of high flux of neutrons obtained by the spallation process of 20 GeV/c protons onto a solid lead target and the remarkable beam intensity of the Proton Synchrotron (PS). From Nov 2008 the n_TOF facility resumed operation after a halt of 4 years due to radio-protection issues. It features a new lead spallation target with a more robust design, more efficient cooling, separate moderator circuit, target area ventilation and most important without any loss of the unique neutron performances of the previous target. The facility has been commissioned in Nov 2008, with performances similar of the previous target and predicted by Monte Carlo simulations and will resume operation for physics from May 2009, after the correct alignment of the last collimator, the proton beam transfer line, the necessary modifications in the cooling circuit, and ventilation of the primary area. There are already 4 experimental proposals approved by the INTC committee and the Research board granted the requested total of 2.5×10^{19} p. A letter of intent submitted to the INTC in April 2005 sketches the outlines of the Phase II physics measurements to be performed at the n_TOF facility, where there is a constant need of about $1.5 \cdot 2 \times 10^{19}$ p/yr for the next 4 years.

Presenter: VLACHOUDIS, Vasilis

Session Classification: Session 5 - Experimental Areas