Contribution ID: **138** Type: **not specified**

CUPID-0: a step forward exploring the inverted hierarchy region of the neutrino mass

Tuesday, 31 May 2016 19:10 (20 minutes)

Summary

CUORE experiment aims to observe neutrinoless double beta decay with a projected sensitivity reaching the inverted hierarchy scale, but to completely explore this region it is mandatory to increase the source mass and a major reduction in background. The CUPID project pursues this goal through several strategies, one of them being the rejection of alpha background by double readout (light and heat) on a scintillating crystal. After a great effort of the LUCIFER collaboration, the first array of Zn82Se bolometers (CUPID-0), is starting construction at the LNGS.
I will present results in terms of background and detector performances of three of the CUPID-0 bolometers and review the status of the experiment and its physics potential.

Presenter: MARTINEZ, Maria (Universita di Roma - la sapienza)

Session Classification: Neutrinos