Contribution ID: 7 Type: not specified

## Reconstructing the rest frame of tau+tau- resonances at the LHC

At LHC energies bosons such as Z and Higgs bosons will be produced with a large boost wrt. the detector frame. Due to the escaping neutrinos in the tau decay, reconstructing the rest frame of such a heavy boson decaying into a pair of taus is highly non-trivial. I will present a new and simple method for rest frame reconstruction that works for all event topologies and for a large fraction of events can be applied without using any information about the missing transverse energy in the event. Finally some applications of the rest frame reconstructions will be shown.

Primary author: ROSENDAHL, Peter Lundgaard (University of Bergen)

Co-authors: STUGU, Bjarne (University of Bergen); BURGESS, Thomas (University of Bergen)

Presenter: ROSENDAHL, Peter Lundgaard (University of Bergen)