

# Re-organization



rename **jet/met** → **hcal/jet/met**.

new organization

**Organized by Shuichi Kunori/Sarah Eno**

Physics Objects & HLT: Sasha Nikitenko

Detector Simulation: Sunanda Banerjee

Detector Reconstruction & Testbeam: Salavat Abdullin

Calibration: Olga Kodolova

organization of HCAL software by Salavat Abdullin

March 3 and March 9 9:00-11:00

organization of new calibration effort by Olga Kodolova

organization meetings March 5 9:00-11:00 and March 6 11:00-12:30 this CMS week

organization of simulation effort by Sunanda Banerjee

# Results



## CMS notes:

Missing Transverse Energy Studies with ORCA4 on Minimum Bias and Signal Samples  
- P. Hidas with S. Abdullin and S. Eno

Energy Corrections for QCD Jets - S. Arcelli and S. Abdullin with S. Eno, S. Kunori,  
A. Krokhotine

On Improvement of Level-1 Trigger MET Measurement -- S. Abdullin with S. Eno

A Study of a First and Second Level Tau Trigger - A. Nikitenko with S. Eno, S. Dasu,  
R. Kinnunen and W. Smith

Weighting Bunch Crossings to Calculate Rates in the Presense of Pileup -James  
Branson and Eliane Trepagnier

Statistical Issues for the Met Trigger - Paris Sphicas, Sarah Eno

A Study of a Second Level Tau Trigger - A. Nikitenko with S. Eno, R. Kinnunen

# Milestones



Jun 01: find algorithms appropriate for the HLT for the following:

- 1) removing fake jets
- 2) determining the energy of jets
- 3) determining MET
- 4) adding tracks to tau's

and evaluate their effectiveness using a simulation of the HCAL that includes a realistic simulation of the electronics

Nov 01: determine the lowest rate we can achieve with good efficiency for the following signals

- 1) Higgs produced by bosonic fusion which decays to SUSY LSP's
- 2) Higgs produced by bosonic fusion which decays to two tau's, and where at least one of the tau's decays hadronically
- 3) SUSY higgs to two taus, at least one of the tau's decaying hadronically
- 4) low mass supersymmetry to jets + MET

# Projects desperately needing manpower



- 1) We need more people than just Sasha and Ritva to take a physics channel and trace it all the way through (Jim Brooke may do invisible Higgs, Mehmet Zeyrek will work on qqH)
- 2) We need somebody to work on adding tracking to our jet finding. L3, with a similar detector, found they could get a factor 1.5 reduction in jet resolution this way
- 3) need an ntuple maker that combines jet, electron, muon variables

*Please, if you know of anybody who can work on these topics...*