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# Sensitivity with number of hadronic energy fraction bins

Numu group, Sep. 2016

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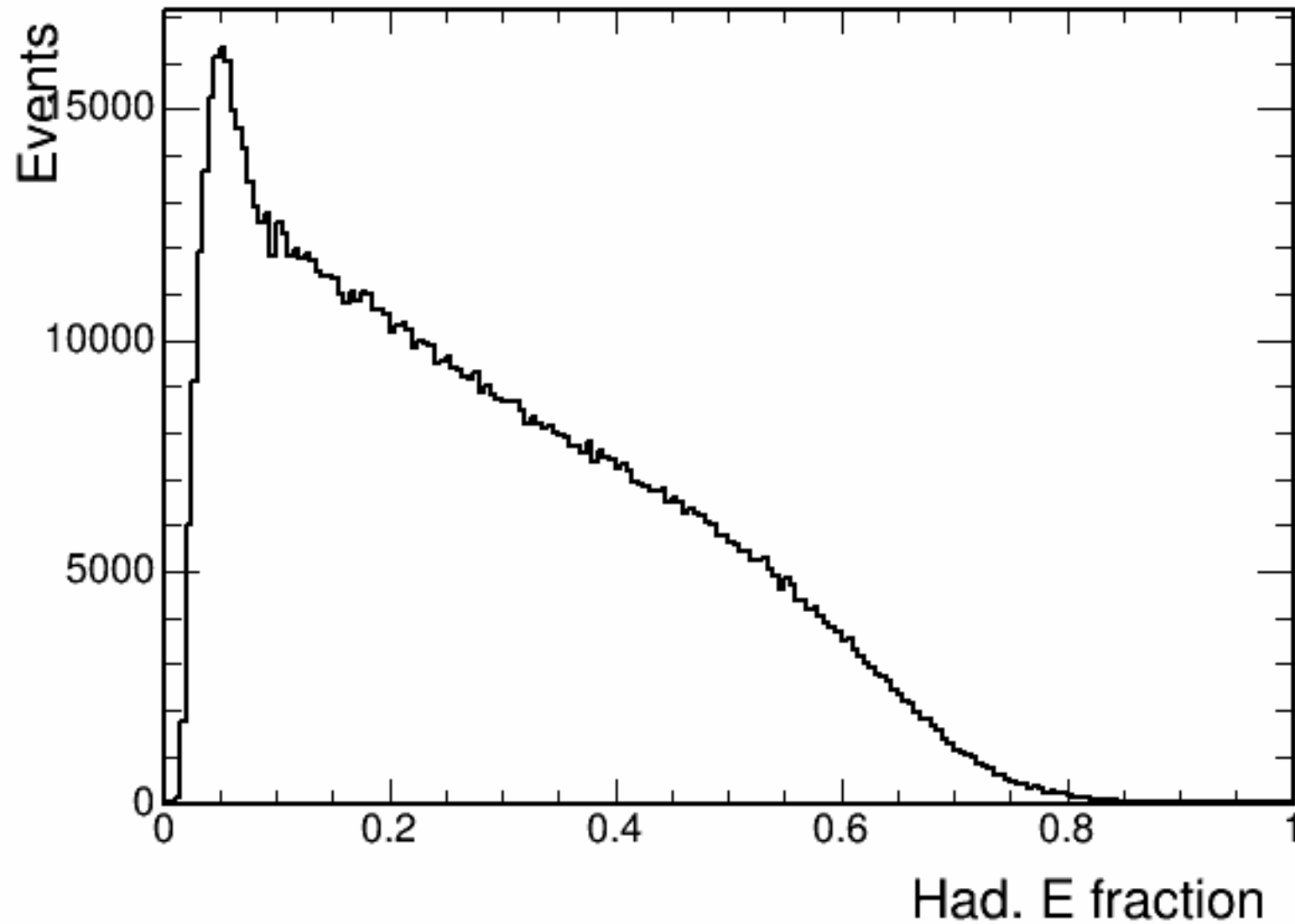
# Version details

- Running in **development**
- Using FD decafs: </pnfs/nova/persistent/production/concat/R16-03-03-prod2reco.d/>

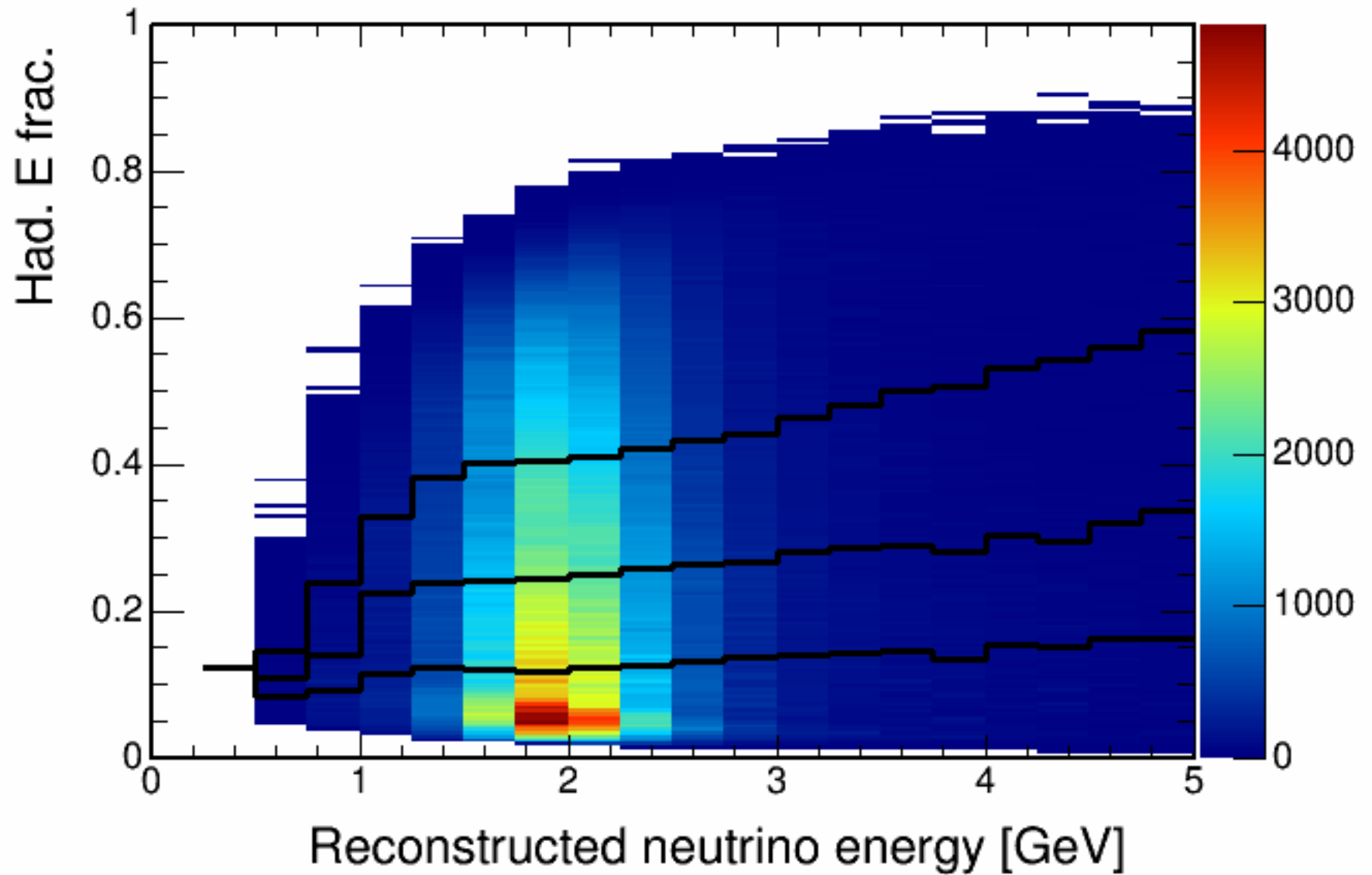
# Outline

- Hadronic energy fraction vs. neutrino energy
- Sensitivity contours with hadronic energy binning
  - Full numu systematics
  - Extrapolation
- Hadronic energy fraction vs. nprongs and vs. ReMId

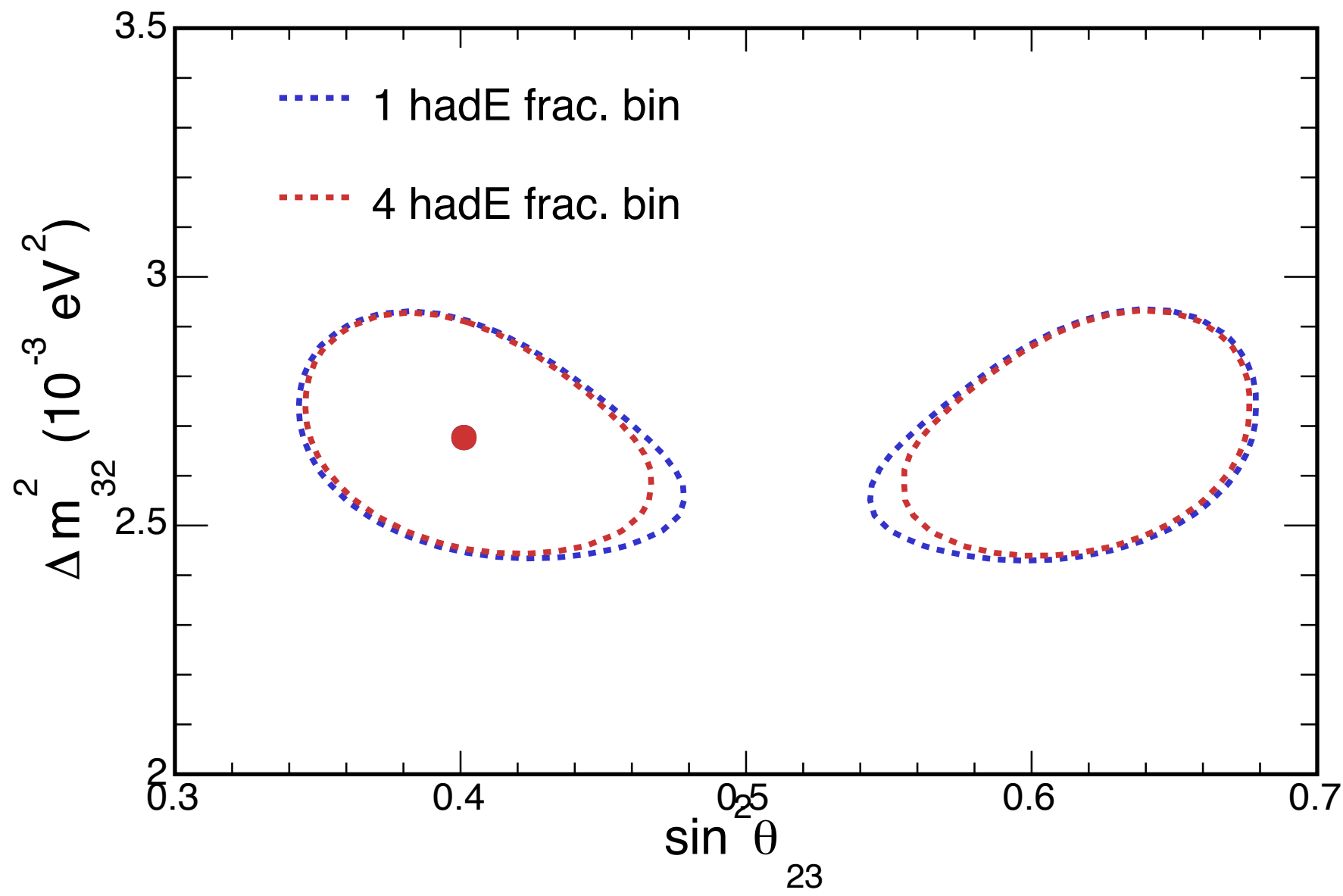
# Hadronic energy fraction



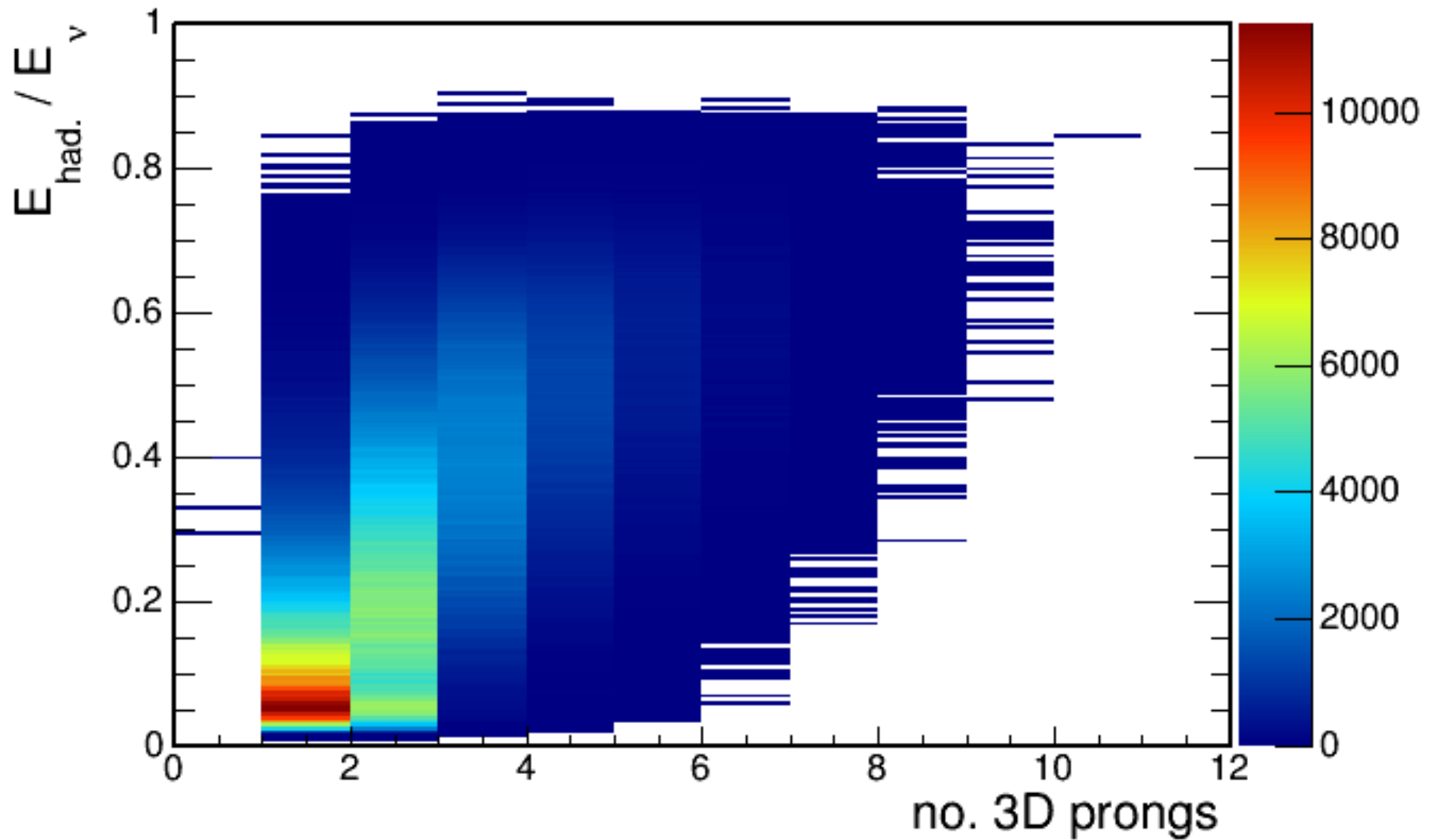
# Hadronic energy fraction vs. reco. energy, 4 quantiles



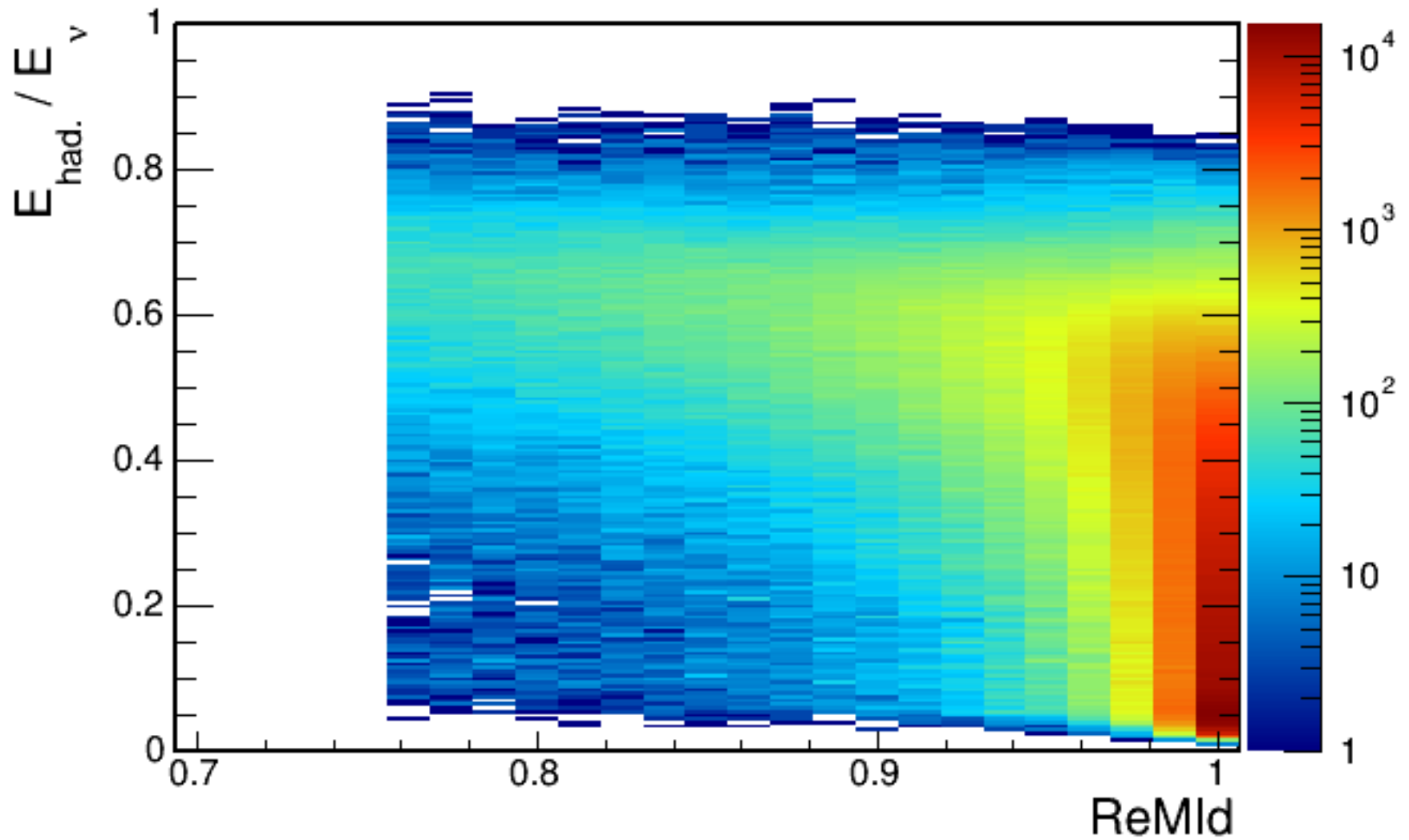
# Sensitivity with hadronic energy fraction binning



# Hadronic energy fraction vs. no. 3D prongs



# Hadronic energy fraction vs. ReMId





# Summary

- Bin

# Future plan

- Re

# Backup