

$B^0 \rightarrow K^{0*}(K\pi)\mu\mu$ full angular analysis
Status Update

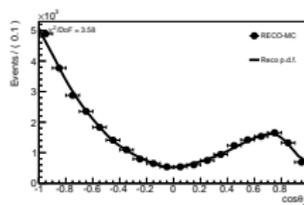
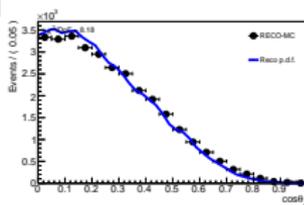
Stefano Lacaprara, Alessio Boletti

INFN Padova, Università di Padova

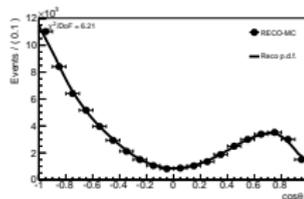
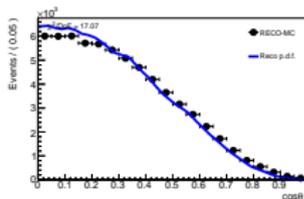
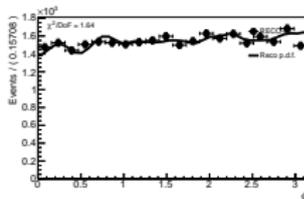
AFB meeting,
CERN, 17 Dec 2015

Progress since last week

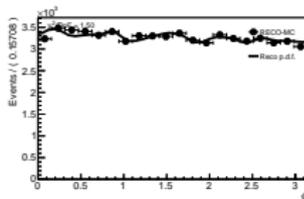
- Shared code for tri-linear interpolation for `rooHistData` class;
- found and fixed a bug** when dealing with interpolation near the boundary of the histogram;
 - re-shared code
 - fit test shows that the problem in pdf plot previously reported was actually related to the above bug;
- fitted pdf is smooth and does not have any saw-tooth shape**
- Issue solved!



Bin 0



Bin 1



- some progress in performing fit with Linwei's code
 - ▶ the problems we got were due to:
 - ★ fixed F1
 - ★ use of `mistag > 0` even if `trueGoodtag` were set
 - ▶ now fit is decent at least in some bins;
- generation of 100 toy MC for eff. computation to estimate the syst due to MC statistics
 - ▶ status
 - Right-tag Complete
 - Wrong-tag 70% Complete
 - ▶ four efficiencies using $1/4^{th}$ of the available MC sample are ready as well;
 - ▶ ready to estimate this systematics as soon as the fit on MC is stable.