Hi,

I think the basic problem for a perfect MC match is, that there is none! Sometimes reconstructed objects cannot by unambiguously assigned to MC truth objects, since a track candidate or cluster might consist of hits created by different particles.

This means, that a measured efficiency not only has a statistic error, but a systematic one in addition due to the imperfect assignment of the truth. We just don't care about it for the time being...

Best,
Klaus