

art - Support #8690

Implementing the TEfficiency class in TFileService

05/09/2015 02:31 PM - Leon Rochester

Status:	Closed	Start date:	05/09/2015
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	User Code	Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Scope:	Internal	SSI Package:	
Experiment:	-		

Description

A good fraction of the histograms that we fill are efficiencies of one sort or another. The TEfficiency class of ROOT is specifically designed for this purpose. It acts like a histogram, but is stored internally as two histograms, one for the trials and a 2nd for the successes. This makes it possible to Add() efficiency histograms, fit with the correct binomial errors, generate various confidence levels, etc. It has many methods in common with those of ordinary histograms.

The existence of this class is not common knowledge, but it should be!

In any case, TEfficiency is not currently implemented in TFileService. I'm guessing (hoping) that adding this to the service wouldn't be a big deal. Once it's in there, I can start urging people to try it!

See <https://root.cern.ch/root/html/TEfficiency.html>

History

#1 - 05/11/2015 12:32 PM - Christopher Green

- Category set to User Code
- Status changed from New to Feedback

TFileService has two function template overloads which we believe are applicable to your situation: make<>() and makeAndRegister<>(). The former is intended for entities such as THxxx, which append themselves to the current TDirectory automatically, and the latter for entities such as TGraph, which do not. Please try using the make<>() function for TEfficiency, as the documentation to which you link states that objects of this type are automatically added to the current TDirectory.

Please let us know if this has the behavior you desire.

#2 - 05/13/2015 12:05 AM - Leon Rochester

Hello,

It looks like this was a pilot error. It seems to be working now.

Thanks for your quick response.

#3 - 07/17/2015 09:24 AM - Kyle Knoepfel

- Tracker changed from Feature to Support
- Status changed from Feedback to Closed