

News

D. Piparo (CERN, EP-SFT)

ROOT

Data Analysis Framework

<https://root.cern>

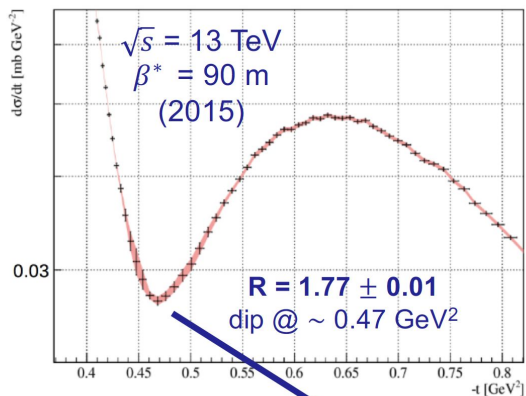


HSF New WGs and Workshop

- ▶ New HSF working groups were formed, among which Analysis
- ▶ Conveners: A. Rizzi, P. Laycock, D. Piparo
- ▶ Medium term objectives:
 - Statement of objectives for 2019
 - Kick-off meeting in January/February
 - Session at the HSW Workshop 18-22 March 2019 at JLab
<https://indico.cern.ch/event/759388>

Diffraction dip in pp @ LHC

TOTEM: observation of diffractive dip in $d\sigma_{el}/dt$ @ $\sqrt{s} = 13$ TeV



Proto analysis of same data also tested with ROOT using parallel processing:

- R&D between TOTEM, EP-SFT, IT-ST & IT-DB within Helix Nebula project
- To test usage of big data tools (Spark) to run analysis code
- Input: 4.7 TB; parallelisation on up to 256 cores, execution time 7 min

An R&D that delivers results!

<https://indico.cern.ch/event/771106/>

paper draft in collaboration wide review in the next days !!

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH



TOTEM 2018-003
November 27, 2018



CERN-PH-EP-2018-?
November 27, 2018

Elastic differential cross-section measurement at $\sqrt{s} = 13$ TeV by TOTEM