Introduction to the tutorial

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11/01/2025

Welcome to the IIIʳᵈ software Tutorial

Events   Contributions   Materials   Notes (0)   Categories (0)

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SHOE software tutorial

Shoe Software Tutorial of FEB 11 and 12, 2024 09:30 AM Rome Zoom link: https://uniroma1.zoom.us/j/99912444114?pwd=MnhYL0VkazNsTmFnUW0wdDllZldtdz09 Meeting ID: 999 1244 4114 Passcode: 189320 (old tutorial page: https://agenda.infn.it/event/2

Yunsheng Dong (Istituto Nazionale di Fisica Nucleare), Marco Toppi (Istituto Nazionale di Fisica Nucleare)

11 February 2025 - 12 February 2025

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SHOE software tutorial

Shoe Software Tutorial of Feb 10, 2021 09:30 AM Rome Join Zoom Meeting https://zoom.us/j/94372037003?pwd=U0RyOXZpTndTcFYvbGhXMzNYU2RuUT09 Meeting ID: 943 7203 7003 Passcode: <3Shoe Shoe Software Tutorial of Feb 11, 2021 09:30 AM Rome Join

10 February 2021 - 11 February 2021

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FOOT Simulation Tutorial

13 June 2018 - 14 June 2018

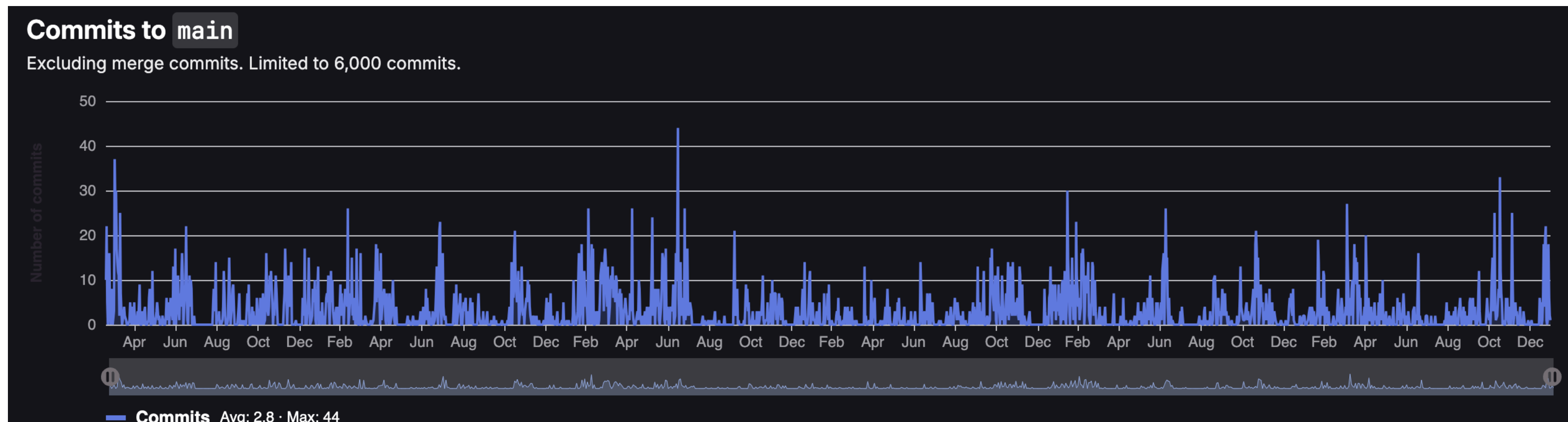Aula Polvani (Milano)

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FOOT Software tutorials

20 October 2016 - 21 October 2016

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Software development

- We began in 2016 with a software framework inherited from the FIRST experiment

- A lot of work has been done in the past ~10 years

- Software development is still ongoing and it is very active

- At present, the framework development is completed, along with the reconstruction software for almost all FOOT detectors

- The remaining tasks primarily involve the development of the reconstruction software of few detectors and data analysis

SHOE (Software for Hadrontherapy Optimization Experiment)

SHOE is a framework developed to:

Simulation

- create the FLUKA MC simulation input files (geometry, .inp, ROUTINES)

Reconstruction

- Process **both MC and data** to digitise the information and reconstruct detector **LOCAL** quantities (hits, points, tracks)

- Process detector local hits/points to reconstruct **GLOBAL** tracks

Analysis

- Combine information from detectors/MC to calibrate and evaluate detector performances

- Combine global tracks and detector local hits/tracks/MC information to evaluate calculate cross sections

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12 February

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In this tutorial we'll provide you with general information on how the code is structured, how to run an executable, and how to start to perform data analysis

Few information

- The slides are on INDICO:
  https://agenda.infn.it/event/44111/

- Same zoom link for both days:
  https://uniroma1.zoom.us/j/99912444114?pwd=MnhYL0VkazNsTmFnUW0wdDllZldtdz09

- **The event is registered and the registration will be available to the whole collaboration**

Many, many thanks to Christian, Marco, Giuseppe, Silvia, and Roberto, who did most of the work for this tutorial