56th Geant4 Technical Forum : Introduction to developers' part

Marc Verderi

LLR, Ecole polytechnique

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Tragedy & Solidarity

- The tragedy of the war in Ukraine is a shock to us.
- The today's brutality and violence inflicted on the Ukrainian people seemed like an impossible scenario just a few weeks ago, belonging to other ages.
- We are concerned too by the uncertain situation that our Russian colleagues face and how this may evolve.
- We can only express our deepest solidarity with all of these people and we hope that all needed efforts will be made to stop this tragedy shortly.

Developers' Presentation Overview

- This year release will be a minor one, Geant4 11.1.

- **Today's Technical Forum is dedicated to expose and initiate discussion on the work plan : content, priorities, etc.**

- Information on recent patch-01 to release 11.0 will be given too.

- Todays' developers' presentations:

  - 2022 Work-plan: non-physics part, Gabriele Cosmo

  - 2022 Work-plan: Electromagnetic physics part, Vladimir Ivantchenko

  - 2022 Work-plan: Hadronic physics part, Alberto Ribon

  - 2022 Work-plan for R&D, Witold Pokorsky

- Plus the traditional presentation on requirements (Marc)

Other information

- **HL-LHC Computing Review Stage-2: Common Software Projects:**
  - Final report has been published short after last TF meeting (January 2022):
  - https://cds.cern.ch/record/2803119
  - The report is globally positive on the efforts, planned developments and investments.
    - We think it reflects the discussion we had and concerns we rose.
  - Recommendations about **shared efforts with the experiments** have been formulated, eg:
    - "*We encourage Geant4 and the experiments to reinforce such collaborative efforts that not only streamline communication but also facilitate sharing effort towards common goals such as, for example, AI-based fast Monte Carlo projects.*"
- **Fast Calorimeter Simulation Challenge 2022:**
  - "*The purpose of this challenge is to spur the development and benchmarking of fast and high-fidelity calorimeter shower generation using deep learning methods.*"
  - Challenge running this year, closing by December.
  - https://calochallenge.github.io/homepage/
  - Organizers (**G4 members**): Michele Faucci Gianelli, Gregor Kasieczka, Claudius Krause, Ben Nachman, **Dalila Salamani**, David Shih and **Anna Zaborowska.**
- **Geant4 website is under revision** and should become public shortly:
  - Please then complain if you don't find anymore your favorite information !
  - Effort started with nice initiative of Anna Zaborowska, Grigorii Latyshev and Dmitri Konstantinov !
- **Geant4 spokesperson election** is starting, and should be concluded in a few weeks.