



HSF Detector Simulation Working Group Meeting

<https://hepsoftwarefoundation.org/workinggroups/detsim.html>

(New) Conveners:

Ben Morgan (ATLAS, Geant4, The University of Warwick)

Kevin Pedro (CMS, Fermilab)

Krzysztof Genser ((Mu2e), Geant4, Fermilab)

22nd of February 2021

- Thank you to former conveners:
 - Philippe Canal, Gloria Corti & Witek Pokorski
- New Meeting time: (Some) Mondays 17:30 Central European Time (CET) or Central European Summer Time (CEST)
- Today's talk:
 - Muon Collider Detectors
 - Speaker: Nazar Bartosik (University & INFN Torino (IT))
- Next Meeting: 8th of March 2021
 - Matthew Szydakis will talk about NEST (Noble Element Simulation Technique)

- Plans for future meetings
 - Computational challenges in future detectors
 - Simulation for liquid noble gas detectors
 - Use of GPUs and similar accelerators
 - Developments in ML for simulation
 - Geometry: recent developments and experiences with DD4hep, VecGeom
 - In coordination with Reconstruction and Software Triggers Working Group
 - Use of non Geant4 simulation toolkits by experiments
 - Dealing with pile-up (possible cross-link with Frameworks, Reconstruction?)
- Will coordinate with Geant4 Task Force for R&D and other HSF Working Groups to avoid duplication and identify possible joint meetings
- Further ideas and input very welcome, especially for cross-Working Group items
 - Feel free to contact the conveners to suggest a topic, volunteer a talk or provide feedback
- If you are not a member of the Detector Simulation Google Group and would like to join, please go to: <https://groups.google.com/g/hsf-simulation>