



Introduction to plenary 3 : Feedback on Collaboration Evolution

28th Geant4 Collaboration Meeting,

25th - 29th September 2023,

Hokkaido University,

Marc Verderi (LLR) & Jonas Hahnfeld (CERN)

Plenary 3



- **On the agenda:**

- **“Early Career Researchers Committee”** (ECRC)

- a “forum” for new & young Geant4 members
 - held by **Lorenzo Pezzotti** (elected) and Carlo Mancini Terracciano (deputy)

- **“Collaboration Evolution Task Force”**

- held by **Anna Zaborowska**, nominated by the SB
 - whose task is to make recommendations about the “type b.” proposals
 - see minutes of the 2022 September SB meeting : <https://geant4-internal.web.cern.ch/node/2007>

- **Further expected or proposed items :**

- The **“generation transfer knowledge”** issue

- Where do we stand on this ?

- Part of above the are **“Internal Seminars”**

- None happened after last year CM...
 - Several suggestions made however (see for example Ben’s presentation)
 - Some would need preparation work
 - Some could come for free:
 - Eg : presentations in conferences could be repeated “for free” as internal seminars

- **Tutorials:**

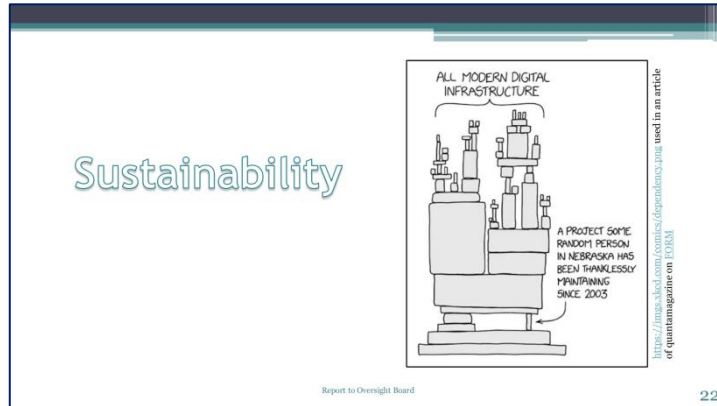
- We have often requests we can’t respond to : how to improve on this ?



Alerting on Expertise Disruption Risk



- This is the biggest danger for Geant4, and a large potential danger for Geant4 users
- This message had been passed (not for the 1st time) to the Oversight Board in February 2023:



Expertise Disruption Risk @ O(10) years

- **In working groups:**
 - Run, Event, and Detector Response **Very High**
 - Particles and Tracking **Very High**
 - Geometry and Transport **Moderate (recent hiring at CERN)**
 - Generic Processes and Materials **Very High**
 - Electromagnetic Physics **Very High (for HEP), Low (for Low EM)**
 - Hadronic Physics **High**
 - Persistency **High**
 - User and Category Interfaces **High**
 - Visualization **Moderate**
 - Physics Lists and Validation Tools **Very High**
 - Testing and Quality Assurance **Moderate**
 - Software Management **Moderate**
 - Documentation Management **Moderate**
 - Novice & Extended Examples **Moderate**
 - Advanced Examples **Moderate**
- **In general tasks:**
 - Release coordination **Very High / certain**
 - General support (registration, web services, etc.) **Very High / on-going**
- **Funding agencies are key to improve on these perspectives !**

Report to Oversight Board

Risks estimated by Marc & Alberto, if nothing changes.

- Was repeated in **March 2023**, at the LHCC meeting, dedicated to the feed-back of the 2021 “**HL-LHC Computing Review Stage-2: Common Software Projects**”
 - Review in which we largely underlined this danger
 - Note that Geant4 was not the only collaboration ringing the alarm bell : the **LHC experiments do have the same problem !**
- Similar message has been passed by Krzysztof Genser @ Snowmass21
- **We understand that this issue is now well recognized**
 - **Hoping funding agencies will have the proper freedom to act as needed...**
 - ... but we will keep repeating anyway ;)