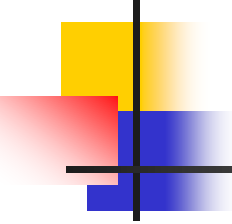
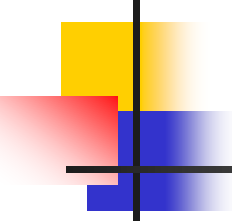


This course



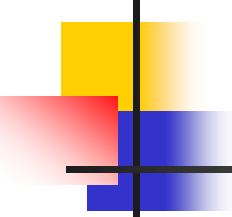
Structure and logistics - 1

- This course is organized in a mixture of **theoretical lectures** and practical **hands-on sessions**
 - The hands-on sessions require **real C++ coding** to build up a **simplified Geant4 application**
 - **Staged approach** in tasks
 - **`http://geant4.lns.infn.it/prague2026/introduction`**
- A **pre-installed virtual machine** is provided for the hands-on sessions
 - Includes **Geant4 11.4.p02** on a Linux environment
 - You should already have it downloaded and tested
 - Please **let us know** ASAP if you have problems



Structure and logistics - 2

- You can **try to install** Geant4 on your (Linux/Mac) laptop, if you wish
 - The course is **not meant** to show that, though
- All **lectures (pdf) will be uploaded** on-the-fly on the course indico page
 - <https://indico.eli-laser.eu/event/231/>
 - Please **feel free to ask any question**, either during the **lectures**, during the **exercises** or during the **breaks**
- **Solutions** of the exercises **will be uploaded** after the end of each exercise session



The exercise

- The **hands-on** consists in building a **full Geant4 application** and get **results**
 - **Step-by-step**: geometry, particles, physics, output
 - Divided in «**tasks**»
 - After each task you can **continue building** on your **own code** (suggested), or restart from a **clean copy** from us
- Goal: evaluate the **full-peak efficiency** of a ^{137}Cs gamma-ray source, distributed over a Cu sphere of radius 1 cm.
 - The gamma-rays are detected by a cylindric 3"x3" **NaI detector**, enclosed in a 3mm-thick Al case. The center of the source is 5 cm far from the detector face

