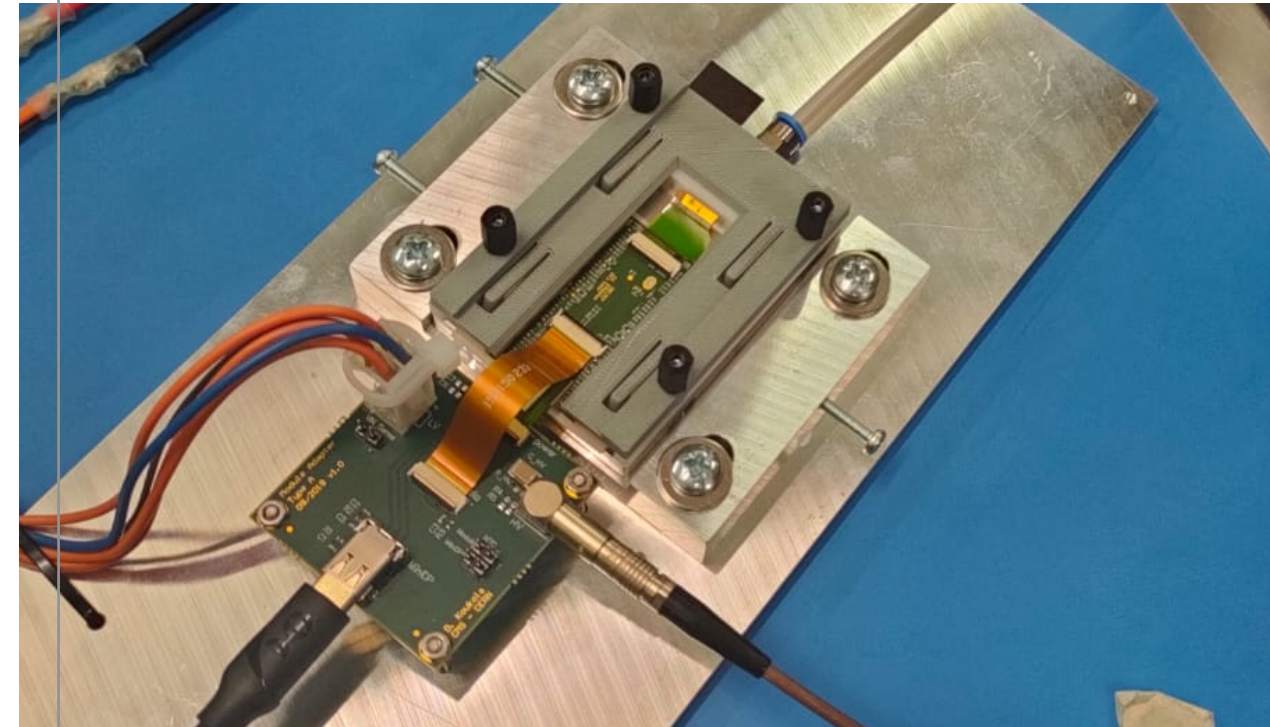
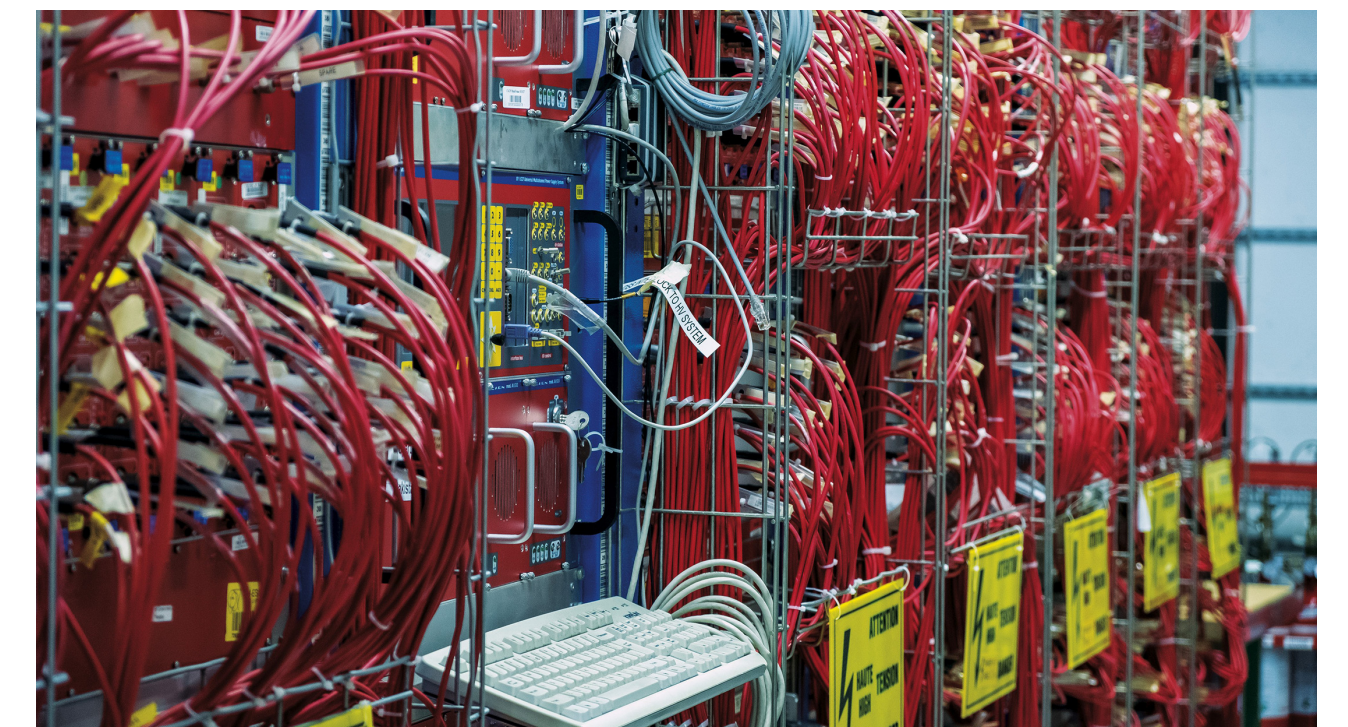


- The INFN Firenze CMS Group is looking for a young researcher for an Experimental Fellowship position (Assegno di Ricerca) on the CMS Tracker Upgrade
- The group (~20 members), among other activities, is heavily involved in the CMS Tracker Upgrade
- We need somebody willing to: play a key role in the R&D first and then in the construction of the detector; be comfortable in the lab, mastering equipments, doing tests and analysing data

## CMS Tracker Upgrade activities in Firenze



**Pixel Inner Tracker Modules**



**Tracker Powering system**



**Pixel Inner Tracker serial powering**

- The CMS Tk Upgrade is unprecedented in terms of scale and complexity and features cutting-edge technologies in all areas:
  - Modules: 3D and planar pixel detectors with 65nm readout ASICs
  - Powering system: ~500kW (>150kW needed by the detectors), 1500+ power supply modules, 20k+ HV and LV channels, 34 racks
  - Innovative serial powering for the innermost part and point-of-load DC-DC conversion in the outer part



**Lorenzo Viliani**  
Team Leader



**Simone Paoletti**  
Power System



**Antonio Cassese**  
Serial Powering



**Giacomo Sguazzoni**  
IT Modules

# Fellowship for Tracker Upgrade in the CMS Firenze Group

- Positions based in Firenze with travels to CERN (Geneva, CH)
- 2-year contract
  - further extensions with different contract typology likely possible
- ~20000€/year net salary plus additional economic incentive (~5000€/year) granted in case of mobility from outside the region
- Qualifications
  - physicist or engineers holding a PhD or about to obtain a PhD
  - know-how of lab activities and system test implementation; software skills for data analysis and lab equipment.
  - teamwork capabilities are needed to fruitfully engage with colleagues and collaborators, to manage a complex project and to actively steer activities, procurement and tests.
- **Application details:**
  - <https://jobs.dsi.infn.it/borseassegni/pdf/getfile.php?filename=24909.pdf> [Italian/English]
  - **Deadline: 10.12.2022 23:59:59 CET**
- **Contact/information:**
  - <https://inspirehep.net/jobs/2175715>
  - Giacomo Sguazzoni +390554572275 (INFN), +41227674079 (CERN)  
[sguazzoni@fi.infn.it](mailto:sguazzoni@fi.infn.it) [giacomo.sguazzoni@cern.ch](mailto:giacomo.sguazzoni@cern.ch)

