

# Nano5

## New architectural design for novel experimental domains



- R&D on simulation methods, technology and architectural design to extend Geant4 kernel capabilities for co-working transport schemes
- **INFN Genova members**
  - M.G. Pia (100%), P. Saracco (30%), M. Batic (100% post-doc fellowship)
- **Activities in progress**
  - R&D on technologies in support of **physics object mutability** in transport: *electromagnetic design prototype*
  - R&D on co-working **condensed/discrete transport** topics: electron *ionisation*
  - R&D on **epistemic uncertainties** in physics models and related design methods
- First results documented in conferences and journal publications
  - **Paper on epistemic uncertainties** currently under review in IEEE Trans. Nucl. Sci.
  - **3 papers** currently in preparation, to be submitted during 2010
  - **CHEP 2010**: 2 talks + 1 poster NANO5
  - **Monte Carlo 2010**: 9 talks NANO5
  - **IEEE NSS 2010**: 6 talks + 1 poster NANO5, + 1 talk on Geant4 scientometrics
- **Work plan for 2011**: along the lines of activity in progress
- **Financial requests** similar to previous years
- **Workload on Section Services**: normal support from Computing Service
- *Acknowledgments to INFN Genova Computing Service in our publications*