

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 (50%), M. Sudhakar (100%), borsa di dottorato dedicata (100%, derivante da fondi esterni)
- **Activities in progress**
 - Problems domain analysis and exploration of candidate solutions for co-working **condensed/discrete transport** issues: *PIXE prototype*
 - Evaluation of software technologies in support of **physics object mutability** in transport: *electromagnetic design prototype*
- **Work plan for 2010:** along the lines of activity in progress
- First results documented in conferences (subject to peer review) and journal publications
 - **2 papers** currently under review in IEEE Trans. Nucl. Sci.
 - **Paper** in collaboration with CERN RADMON, TNS vol. 56, no. 4, August 2009
 - **CHEP 2009:** 2 talks + 1 poster (+ proceedings)
 - **M&C 2009:** oral presentation (+ proceedings)
 - 8 abstracts submitted to IEEE **NSS** + 1 on Geant4 scientometrics, under review
- **Financial requests** similar to previous years
- *Acknowledgments to INFN Genova Computing Service in publications*