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Applications of the FLUKA Monte Carlo code in High Energy and Accelerator Physics

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The FLUKA Monte Carlo transport code is being used for different applications in High Energy, Cosmic Ray and Accelerator Physics. Here we review some of the ongoing projects which are based on this simulation tool.

In particular, as far as accelerator physics is concerned, we wish to summarize the work in progress for the LHC and the CNGS project. From the point of view of experimental activity, a part the activity going in the framework of LHC detectors, we wish to discuss as a major example the application of FLUKA to the ICARUS Liquid Argon TPC.

Upgrades in cosmic ray calculations, to demonstrate the capability of FLUKA to reproduce existing experimental data, are also presented

Primary authors: EMPL, A. (University of Houston, Texas, USA); FASSO, A. (SLAC, Stanford, USA); FERRARI, A. (CERN, Geneva, Switzerland); OTTOLENGHI, A. (Universita' and INFN Pavia); SCANNICCHIO, D. (Univeristy and INFN, Pavia, Italy); GADIOLI, E. (University and INFN, Milano, Italy); BALLARINI, F. (University and INFN Pavia, Italy); CERUTTI, F. (Univeristy and INFN Milano, Italy); BATTISTONI, G. (INFN Milano, Italy); RANFT, J. (University of Siegen, Germany); TSOULOU, K. (CERN Geneva, Switzerland); PINSKY, L. (University of Houston, Texas, USA); GARZELLI, M. V. (Univeristy and INFN, Milano, Italy); PELLICIONI, M. (INFN, Frascati, Italy); SALA, P. (ETH, Zurich, Switzerland); MURARO, S. (INFN Milano, Italy); ROESLER, S. (CERN, Geneva, Switzerland); RANCATI, T. (INFN Milano, Italy); PARINI, V. (INFN and University di Pavia, Italy); VLACHOUDIS, V. (CERN, Geneva, Switzerland)

Presenter: BATTISTONI, G. (INFN Milano, Italy)

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