Contribution ID: **83** Type: **poster**

Simulation of Ultra-High Energy Cosmic Ray Propagation

A future Ultra-High Energy Cosmic Ray (UHECR) Observatory will provide an unprecedented amount of high quality UHECR data. The astrophysical interpretation of this data requires a detailed Monte Carlo simulation of UHECR propagation. The publicly available code CRPropa allows such a simulation, taking into account all relevant energy losses in ambient photon fields and deflections in structured magnetic fields. In this talk the CRPropa software is introduced, recent developments like the extension to UHE nuclei propagation as well as future challenges are discussed.

Primary author: Dr SCHIFFER, Peter (University of Hamburg)

Co-authors: VAN VLIET, Arjen (University of Hamburg); Prof. SIGL, Guenter (University of Hamburg); KULBARTZ, Joerg (University of Hamburg); KAMPERT, Karl-Heinz (Universität Wuppertal); MACCIONE, Luca (LMU Muenchen); NIERSTENHOEFER, Nils (BU Wuppertal)

Presenter: Dr SCHIFFER, Peter (University of Hamburg)