

Session Program

Jul 12 - 15, 2022



CORSIKA 8 Air-Shower Simulation and Development Workshop

Software development

Max Planck Institute for Nuclear Physics, Otto-Hahn-Hörsaal (library building)
Saupfercheckweg 1, 69117 Heidelberg <https://www.mpi-hd.mpg.de/mpi/en>

Wed, July 13

9:30 AM

Software development

Session |

Location: Max Planck Institute for Nuclear Physics, Otto-Hahn-Hörsaal (library building), Saupfercheckweg 1, 69117 Heidelberg <https://www.mpi-hd.mpg.de/mpi/en>

09:30 – 10:00 **Benchmarking of CORSIKA 8**

Speaker

Nikos Karastathis

10:00 – 10:30 **Status of hadronic interaction models in C8**

Speaker

felix riehn

10:30 – 11:00 **Containers for CORSIKA 8**

Speaker

Dr Lukas Nellen

11:00 AM

2:00 PM

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14:00 – 14:30 **CORSIKA 8 physics validation**

Speaker

Lukas Nellen

14:30 – 15:00 **New tracking/continuous processes/propagation code**

Speaker

Maximilian Reininghaus

15:00 – 15:30 **Thoughts on the organization of CORSIKA 8 development**

Speaker

Dr Antonio Augusto Alves Junior

3:30 PM

4:00 PM

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16:00 – 16:15 **2D solution of Cascade Equations**

Speaker

Tetiana Kozynets

16:15 – 16:45 **About the Progress of accelerated Photon propagation**

Speaker

Dominik Baack

16:45 – 17:15 **Performance and parallelization in CORSIKA 8**

6:00 PM

Speaker

Dr Antonio Augusto Alves Junior

17:15 - 17:35

How to gain single-core performance: Instruction pipelines, CPU cache optimisation, and SIMD

Speaker

Hans Dembinski