

Session Program

Jun 17 - 20, 2019



CORSIKA Cosmic Ray Simulation Workshop Karlsruhe

Status and progress of air shower simulations

Hotel ACHAT PLAZA Karlsruhe
Mendelssohnplatz, 76131 Karlsruhe <https://achat-hotels.com/hotel/karlsruhe-city>

Mon, June 17

11:10 AM

Status and progress of air shower simulations

Session |

Location: Hotel ACHAT PLAZA Karlsruhe, Mendelssohnplatz, 76131 Karlsruhe <https://achat-hotels.com/hotel/karlsruhe-city>

11:10 – 11:25

Introduction

Speaker

Ralph Engel

11:25 – 11:45

The CORSIKA 8 Project

Speaker

Ralf Ulrich

11:45 – 12:05

Status of capabilities of CORSIKA 8, first results and comparisons

Speaker

Maximilian Reininghaus

12:05 – 12:25

The lepton propagator PROPOSAL and the air shower simulation code CORSIKA

Speaker

Alexander Sandrock

12:25 PM

3:30 PM

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15:30 – 15:50

The COSMOS air shower simulation program

Speaker

Takashi Sako

15:50 – 16:45

Hands-On: Simulate your first CORSIKA 8 air shower

Speaker

Ralf Ulrich

16:45 – 17:05

Introduction to template meta-programming in C++

Speaker

Hans Dembinski

5:05 PM

Wed, June 19

11:00 AM

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11:00 – 11:20

Particle propagation for CORSIKA in PROPOSAL

Speaker

Jean-Marco Alameddine

11:20 – 11:40

EmCa - Electromagnetic Cascades Simulation Package

Speaker

Stephan Meighen-Berger

11:40 – 12:30

Hands-On: Physics processes

Speaker

felix riehn

12:35 PM

2:00 PM

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14:00 – 14:30

Python in High-Energy Physics

Speaker

Hans Dembinski

14:30 – 14:50

Optimization and Vectorization

Speaker

Luisa Arrabito

14:50 – 15:10

Atmosphere implementation and approximations

Speaker

Konrad Bernlöhr

15:10 – 15:25

Simulation of radio emission from particle showers in CORSIKA 7 and CORSIKA 8

Speaker

Tim Huege

15:25 – 15:55

Coffee

5:00 PM

Thu, June 20

9:40 AM

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09:40 – 10:20

Hands-On: Geometry and environment setup

Speaker

Maximilian Reininghaus

10:20 AM

10:50 AM

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10:50 – 11:10

DynStack / Memory management - implementation and features

Speaker

Dominik Baack

11:10 – 11:55

Run control and steering

Speaker

Dr Lukas Nellen

11:55 – 12:15

Speedup of extensive air shower simulations with neural networks

Speaker

Marcel Köpke

12:20 PM