



36 X 6 Z DESY School on Z4

Computer Algebra and Particle Physics + x² (CAPP 2007) 7 + 7*x⁵ +

March 25 - 30, 2007 Zeuthen, Germany

The CAPP school combines theory and practice in advanced environment. It provides education and training of about 30 students and young researchers at graduate and Ph.D. level on central topics at the interface of modern computer algebra and particle physics. The courses include exercises and practical training with software and programs.

Lectures and Courses

F. Bornemann (TU Munich)

The SIAM 100-Digit Challenge

N. Glover (IPPP Durham)

On the Why's and How's of Perturbation Theory

J. Gluza (Katowice), T. Riemann (DESY) Feynman Integrals and Mellin-Barnes Representations

T. Hahn (MPI Munich)

Introduction to Mathematica and Algorithms for

Numerical Integration

R. Harlander (U. Wuppertal)

Algebraic Methods for Multi-loop Integrals

F. Maltoni, M. Herquet (U. Louvain) / Introduction to MadGraph/MadEvent

R. Mertig (Wolfram Research)

New Features of Mathematica

S. Moch (DESY), C. Schneider (RISC)

Algorithms for Symbolic Summation

J. Vermaseren (NIKHEF)

Introduction to FORM

S. Weinzierl (U. Mainz)

Basic Concepts and Algorithms of Computer Algebra

Organising Committee: S. Moch, T. Riemann, P. Wegner