Deutsches Elektronen-Synchrotron
in der Helmholtz-Gemeinschaft

DESY School on

Computer Algebra and Particle Physics (CAPP 2005)

Zeuthen, April 03-08, 2005

Computer algebra methods being widely in use throughout elementary particle physics are an essential and established calculational tool. To initiate education and training of about 20 students and young researchers at graduate and Ph.D. level on applications of modern computer algebra, DESY organizes jointly with German universities a *DESY School on Computer Algebra and Particle Physics (CAPP 2005)* to be held at DESY, Zeuthen, during April 03-08, 2005.

Lecturers and Courses

T. Binoth (Würzburg)	*Multi-Leg Amplitudes at One Loop: Methods, Algorithms, Automatization and Numerics*
J. Blümlein (DESY)	*Harmonic Sums, Harmonic Polylogarithms, Special Functions*
M. Czakon (Würzburg)	*Graph Theory Algorithms, Feynman Diagram Computations*
N. Glover (IPPP, Durham)	*Precision Phenomenology and Collider Physics*
T. Hahn (MPI, München)	*Introduction to Mathematica and Cross Sections with FeynArts, FormCalc and Cuba*
R. Harlander (Karlsruhe)	*Algebraic Methods for multi-loop Integrals*
A. Lorca (DESY)	*Automation of Loop Calculations with Diana and aITALC*
S. Moch (DESY)	*Symbolic Summation*
J. Vermaseren (NIKHEF)	*Introduction to FORM*
P. Wegner (DESY)	*Parallel Computing*
S. Weinzierl (Mainz)	*Symbolic Computations in C++ and Introduction to GiNaC*
S. Wiesand (DESY)	*64 bit on Linux - Status and Perspectives*

http://www.desy.de/capp2005

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