Solving problems in HEP with the help of Mathematica

Tue ## Introduction to Mathematica and FORM

Basic programming concepts. How to write efficient Mathematica programs. What makes Mathematica and FORM different.

Wed ## Symbolic Programming Examples

Problems from particle physics solved with Mathematica and FORM.

Thu ## Numeric Programming Examples

Writing external code for Mathematica. Pitfalls of floating-point arithmetic. Memory access, alignment. Parallelization.

Fri ## Using FeynArts and FormCalc

Basic usage. Detailed look at input and output. Tweaking model files. Computing a cross-section. Computing other things.