

PAUL SCHERRER INSTITUT



Particle Theory Seminar

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“Reduze 2 - Distributed Feynman Integral Reduction”

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WBGB/021

Abstract:

Reduze is a computer program for reducing Feynman integrals to master integrals employing a variant of Laporta’s reduction algorithm. In this talk I will present version 2 of the program. New features include the distributed reduction of single topologies on multiple processor cores. The parallel reduction of different topologies is supported via a modular load balancing job system. Fast graph and matroid based algorithms allow for the identification of equivalent topologies and integrals.