1035-33-1044 Carsten Schneider* (cschneid@risc.uni-linz.ac.at), RISC, J. Kepler University, Altenberger Str. 69, 4040 Linz, Austria. *Multi-Summation in Difference Fields*.

In this talk we present recent symbolic summation tools based on difference field theory. The algorithmic ideas are illustrated by concrete examples that arise in the evaluation of Feynman integrals in perturbative quantum field theory. (Received September 18, 2007)