

SFB Colloquium

TIME:

12 Jul 2011, 17:00 - 19:00

LOCATION:

Konrad-Zuse-Zentrum für Informationstechnik Berlin Takustrasse 7 14195 Berlin-Dahlem

PROGRAM:

17:00 - 17:30 COFFEE BREAK

17:30 - 18:30 Karen Yeats

Identities of Feynman graph denominators

If one takes a Feynman integral in parametric form and integrates one edge variable at a time, then the denominators at each stage have nice combinatorial interpretations. From these interpretations we can use graph theoretic tools to derive interesting relations between denominators, which have implications for the values of the Feynman integrals. I will explain the setup and show some of these identities and their implications. This material is fun and interesting for combinatorialists and physicists, and has ties to number theory, and perhaps to knot theory.