Mathematisches Institut, Sidlerstrasse 5, CH-3012 Bern

UNIVERSITÄT BERN

Philosophisch-naturwissenschaftliche Fakultät

Departement Mathematik und Statistik

**Mathematisches Institut**

# Mathematisches Kolloquium

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**Montag, 04. November 2013**

17.15 Uhr, Hörsaal B 78

Prof. Dror Bar-Natan, University of Toronto

## The Kashiwara-Vergne Problem and Topology

**Abstract:**

I will describe a general machine, a close cousin of Taylor's theorem, whose inputs are topics in topology and whose outputs are problems in algebra. There are many inputs the machine can take, and many outputs it produces, but I will concentrate on just one input/output pair. When fed with a certain class of knotted 2-dimensional objects in 4-dimensional space, it outputs the Kashiwara-Vergne Problem (1978, solved by Alekseev-Meinrenken, 2006), a problem about convolutions on Lie groups and Lie algebras.

for further informations please see :
http://www.math.toronto.edu/~drorbn/Talks/Bern-131104/

Please note: There will be no colloquium dinner. Colloquium lunch will take place at 12:30 h at the restaurant Casa d'Italia. Please inform Ch. Riedtmann (christine.riedtmann@math.unibe.ch) in case you want to participate.