

1067-11-690

Emmanuel Kowalski* (kowalski@math.ethz.ch), ETH Zurich - DMATH, Raemistrasse 101,
8092 Zurich, Switzerland. *Recent applications of expanders in number theory.*

The talk will give a survey of some recent applications of expander graphs in number theory, with an emphasis on general principles that seem to be widely applicable. In particular, the topics presented include large sieve inequalities in discrete groups with property (tau), and arithmetic properties of families of coverings of curves when the associated graphs are sufficiently expanding. (Partly joint works with F. Jouve and D. Zywina, and with J. Ellenberg and C. Hall) (Received September 13, 2010)