## Asymptotics in Geometry

Tohoku University, Kawai Hall http://www.math.tohoku.ac.jp/

July 15th(Sat) – July 17th(Mon, holiday), 2006

July 15th(Sat.)

13:00–14:00 Alexander Gamburd (University of California at Santa Cruz.)

Discrete and Continuous Variations on the Expanding Theme I

14:10–15:10 Takefumi Kondo(Kyoto University,D)

Fixed-Point Property of Random Groups

15:30–16:30 Nobuaki Obata(Tohoku University)

Asymptotic spectral analysis of growing graphs and applications

16:40–17:40 Satoshi Ishiwata(Tsukuba University)

A stability of a gradient estimate for the heat kernel on graphs

18:00- party at Math.Building 502

July 16th (Sun.)

10:10–11:10 Alexander Gamburd

Discrete and Continuous Variations on the Expanding Theme II

11:20–12:20 Taro Nagao(Nagoya University)

Semiclassical theory for parametric energy level statistics

Lunch

14:00–15:00 Yiannis Petridis (CUNY, USA)

Distribution of closed geodesics and (co)homological constraints

15:20–16:20 Makoto Minamide(Nagoya University, D)

On the Hadamard products of the Selberg zeta functions

16:40–17:40 Tatsuya Tate(Nagoya University)

A spectral analogue of asymptotics of the number of partitions

July 17th (Mon.)

10:10–11:10 Yiannis Petridis

Perturbation theory in hyperbolic manifolds and scattering poles

11:20–12:20 Jun Masamune (Chuo University & Worcester Polytechnic Institute)

Special Green formulae for non-compact manifolds

# # Educational Lectures

Alexander Gamburd

gives three hours educational lecture on the same title, where he will explain the background.

July 17 th (Mon.) 14:00–15:00 ,15:20–16:20, 16:40–17:40

Yiannis Petridis

gives two hours educational lecture on

"Introduction to the spectral and scattering theory of hyperbolic manifolds".

July 18 th(Tue.)13:00–15:00