

Programme on
“Modern Theory of Wave Equations”
July 6 - September 30, 2015

organized by

**Colin Guillarmou (ENS Paris), Werner Müller (U Bonn), Alexander Strohmaier
(Loughborough U), András Vasy (Stanford U)**

Talks:

- **Tuesday, September 1, 2015**

14:00 – 15:00 **Steve Zelditch**

Heat kernel random Kaehler metrics

- **Wednesday, September 2, 2015**

14:00 – 15:00 **Vesselin Petkov**

Location and Weyl formula for the eigenvalues of some non self-adjoint operators

- **Thursday, September 3, 2015**

14:00 – 15:00 **Leonid Parnovski**

Local Density of States and the spectral function of almost-periodic operators

Abstracts

- **Steve Zelditch:** Since the Polyakov Liouville theory of random surfaces (1980) the problem of defining probability measures on a conformal class of metrics on a Riemann surface has been studied by many people. The approach I take is through geometric approximation theory: following the Tian-Yau-Donaldson program, the space of metrics is approximated by spaces B_k of Bergman metrics of degree k . Bergman metrics correspond to positive Hermitian matrices and form a symmetric space with a heat kernel measure for each t . I will discuss the large k asymptotics of this measure.

All talks take place at the ESI, Boltzmann Lecture Hall!