PROGRAMME OF THE WORKSHOP ANALYTIC STUDY OF FLOWS IN PEYRESQ, JUNE 4-8TH 2018.

Monday:

9h-9h15: Clara Aldana Determinant of Laplacian on sectors
9h30-10h30: Viet Dang Ruelle zeta function and torsion, a survey of D. Fried's work
11h-12h: Viet Dang Ruelle zeta function and torsion, Fried and Morgado
Lunch break
Afternoon: shorts talks
16h - 16h15: Julia Budde, Wave-front set of representations
16h15-16h30: Mihajlo Cekic, Calderon problem for Yang-Mills connections
16h45-17h: Hugo Federico, Spectral gap for normally hyperbolic trapping
17h-17h15: Luc Gossart, Random hyperbolic dynamical systems
17h45-18h: Malo Jezequel, Hyperbolic Gevrey diffeomorphisms
18h00-18h15: Thibault Lefeuvre, Marked length spectrum of Anosov geodesic flows
18h30-18h45: Benjamin Kuester, Ruelle resonances on bundles over hyperbolic manifolds
18h45-19h: Alejandro Rivera, Nodal domains of random functions

9h-9h15: Amir Vig, Spectral theory of the ellipse

9h30-10h30: Tobias Weich, Ruelle Resonances for cusps 1

11h-12h: Yannick Bonthonneau, Ruelle resonances for cusps 2

Lunch

17h-19h: Shu Shen, A geometric construction of the discrete series for semisimple Lie groups, from the paper by Atiyah-Schmidt.

Wednesday:

9h-10h: Colin Guillarmou, *The scattering calculus of Melrose*, preparation for the paper of Uhlmann-Vasy.

10h30-11h30: Robin Graham, *The local X-ray transform 1*, from the paper of Uhlmann-Vasy.

11h30-12h30: Thibault Lefeuvre, *The local X-ray transform 2*, from the paper of Uhlmann-Vasy and Paternain-Salo-Uhlmann.

 $\label{eq:afternoon} Afternoon: \ discussions/free \ afternoon.$

Thursday:

9h-9h15: Jens Wittsen, Random perturbations of a partially hyperbolic map.

9h30-10h30: Malo Jezequel, *Spectral gaps without the pressure condition 1*, from the paper of Bourgain-Dyatlov

11h-12h: Benjamin Kuester, *Spectral gaps without the pressure condition 2*, from the paper of Bourgain-Dyatlov

Lunch and break

16h30-16h45: Khadim War, Open dense sets of exponentially mixing Anosov flows.

17h-19h: Fabricio Macia, *The Radon transform of Zoll surfaces*, from the article of V. Guillemin.

Friday

8h45-9h45: Gerhard Knieper, *The geodesic flow in non-positive curvature*, 1 10h-11h: Gerhard Knieper, *The geodesic flow in non-positive curvature*, 2