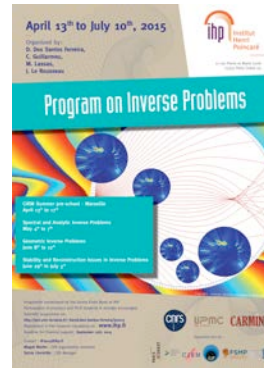


« Program on Inverse Problems »
Paris, April 13th – July 10th, 2015

Conference « Spectral and Analytic Inverse Problems »
Paris, May 4th – 7th, 2015
Amphithéâtre Hermite



Organizers :

David Dos Santos Ferreira (Université de Lorraine), **Luc Robbiano** (Université Versailles-Saint Quentin) and **Thierry Daudé** (Université de Cergy-Pontoise)

Scientific Committee : **Yaroslav Kurylev** (University College London), **Vesselin Petkov** (Université de Bordeaux), **Mikko Salo** (University of Jyväskylä), **Gunther Uhlmann** (University of Washington), **Steve Zelditch** (Northwestern University)

Speakers :

Eemeli Blåsten (University of Helsinki)

Laurent Bourgeois (ENSTA)

Tanya Christiansen (University of Missouri)

Yves Colin de Verdière (Institut Fourier, Grenoble)

David Colton (University of Delaware)

Allan Greenleaf (University of Rochester)

Boaz Haberman (University of California, Berkeley)

Hiroshi Isozaki (Tsukuba University)

Alexandre Jollivet (Université de Lille)

Yavar Kian (Université de Marseille)

Evgeny Lakshtanov (University of Aveiro)

Hongyu Liu (Hong Kong Baptist University)

Georgi Popov (Université de Nantes)

Rakesh (University of Delaware)

Alberto Ruiz (Universidad autonoma de Madrid)

Antonio Sà Barreto (Purdue University)

Eric Soccorsi (Université de Marseille)

John Sylvester (University of Washington)

Gerald Teschl (University of Vienna)

András Vasy (Stanford University)

Ting Zhou (Northeastern University)

Miren Zubeldia (University of Helsinki)

PROGRAM

Monday May 4th

| | | |
|---------------------|--|--|
| 09.00 am – 09.30 am | Registration – IHP Ground floor | |
| 09.30 am – 10.30 am | John Sylvester | The Role of Evanescence in the Inverse Source Problem. |
| 10.30 am – 11.00 am | Coffee break | IHP Ground floor |
| 11.00 am – 12.00 pm | David Colton | Transmission Eigenvalues for Spherically Stratified Media. |
| 12.00 pm – 02.00 pm | Lunch break | |
| 02.00 pm – 03.00 pm | Evgeny Lakshtanov | On some constructive and explicit solutions in inverse scattering theory. |
| 03.00 pm – 04.00 pm | Eemeli Blåsten | A new viewpoint to scattering theory à la Hörmander. |
| 04.00 pm – 04.30 pm | Coffee break | IHP Ground floor |
| 04.30 pm – 05.30 pm | Ting Zhou | On uniqueness of an inverse problem for the time-harmonic Maxwell equations. |

Tuesday May 5th

| | | |
|---------------------|---------------------------|---|
| 09.00 am – 10.00 am | Hiroshi Isozaki | Inverse scattering on non-compact manifolds with general metric. |
| 10.00 am – 10.30 am | Coffee break | IHP Ground floor |
| 10.30 am – 11.30 pm | Tanya Christiansen | Resonances for Schrödinger operators. |
| 11.30 am – 12.30 pm | Antonio Sà Barreto | Unique continuation from infinity and inverse problems in geometric scattering. |
| 12.30 pm – 02.30 pm | Lunch break | |
| 02.30 pm – 03.30 pm | Eric Soccorsi | An inverse spectral problem in a periodic quantum waveguide. |
| 03.30 pm – 04.30 pm | Yavar Kian | A multidimensional Borg-Levinson theorem for magnetic Schrödinger operators with partial spectral data. |
| 04.30 pm – 05.00 pm | Coffee break | IHP Ground floor |
| 05.00 pm – 06.00 pm | András Vasy | The local inverse problem for the geodesic X-ray transform on tensors and boundary rigidity. |

Wednesday May 6th

| | | |
|---------------------|-------------------------------|--|
| 09.00 am – 10.00 am | Georgi Popov | Isospectral deformations K.A.M. tori and spectral rigidity. |
| 10.00 am – 10.30 am | Coffee break | IHP Ground floor |
| 10.30 am – 11.30 pm | Gerald Teschl | Peakon asymptotics for the dispersionless Camassa-Holm equation. |
| 11.30 pm – 12.30 pm | Yves Colin de Verdière | Direct and inverse spectral problems for sub-Riemannian (sR) Laplacians. |
| 12.30 pm – 02.30 pm | Lunch break | |
| 02.30 pm – 03.30 pm | Miren Zubeldia | Transmission eigenvalues for magnetic Schrödinger operator. |
| 03.30 pm – 04.30 pm | Hongyu Liu | Stable determination of polyhedral scatterers by a minimal number of far-field measurements. |
| 04.30 pm – 05.00 pm | IHP Coffee break | Ground floor |

05.00 pm – 06.00 pm **Alberto Ruiz** Stability of the Calderón problem with partial data.
06.30 pm **Cocktail Party** IHP Ground floor

Thursday May 7th

09.00 am – 10.00 am **Boaz Haberman** Unique continuation and inverse boundary value problems for elliptic operators with unbounded gradient terms.
10.00 am – 10.30 am Coffee break IHP Ground floor
10.30 am – 11.30 pm **Rakesh** The inverse backscattering problem.
11.30 am – 12.30 pm **Laurent Bourgeois** The inverse Robin problem revisited for non-smooth coefficient.
12.30 pm – 02.30 pm Lunch break
02.30 pm – 03.30 pm **Alexandre Jollivet** Inverse scattering at high energies for classical particles in a long range electromagnetic field.
03.30 pm – 04.30 pm **Allan Greenleaf** Virtual Hybrid Edge Detection.
04.30 pm – 05.00 pm Coffee break IHP Ground floor

Abstracts are available on the web site of the trimester « Program on Inverse Problems » : <http://iecl.univ-lorraine.fr/~David.Dos-Santos-Ferreira/ipconferences/ipconf.html>