

« Geometry and analysis of surface group representations »  
Paris, January 3<sup>rd</sup> - March 30<sup>th</sup>, 2012

« Conference : Surface groups in Paris »  
March 5<sup>th</sup> – 9<sup>th</sup>, 2012  
Amphithéâtre Hermite

11 rue Pierre et Marie Curie – Paris 5<sup>ème</sup>



#### Organizers

**Bill Goldman** (University of Maryland), **Olivier Guichard** (Université Paris-Sud, Orsay), **François Labourie** (Université Paris-Sud, Orsay), **Jean-Marc Schlenker** (Toulouse 3, IMT), **Anna Wienhard** (Princeton University)

#### Speakers

**Javier Aramayona** (Galway)  
**Shinpei Baba** (Caltech)  
**Serge Cantat** (Rennes and ENS)  
**Virginie Charette** (Sherbrooke)  
**François Costantino** (Strasbourg)  
**Bertrand Deroin** (Orsay)  
**Moon Duchin** (Tufts University)  
**Vladimir Fock** (Strasbourg)  
**Antonin Guilloux** (Paris 6)  
**Fanny Kassel** (Lille)  
**Steve Kerckhoff** (Stanford)  
**Maxim Kontsevich** (IHES)  
**Cyril Lecuire** (Toulouse)  
**Jean-François Le Gall** (Orsay)  
**Howard Masur** (University Chicago)  
**Yair Minsky** (Yale)  
**Bob Penner** (Caltech and Aarhus)  
**Andrés Sambarino** (Orsay)

## Program

### Monday March 5<sup>th</sup>

09.00 am – 10.00 am	<i>Registration and welcome Coffee – Ground floor</i>
10.00 am – 11.00 am	<b>Steve Kerckhoff</b> Hyperbolic and AdS Geometry in Dimension 3.
11.00 am – 11.30 am	<i>Coffee Break – Ground floor</i>
11.30 am – 12.30 pm	<b>Virginie Charette</b> Ideal triangulations and fundamental domains for flat Lorentzian manifolds.
<b>12.30 pm – 03.00 pm</b>	<b>Lunch</b>
03.00 pm – 04.00 pm	<b>Cyril Lecuire</b> Sequences of quasi-Fuchsian groups.
04.00 pm – 04.30 pm	<i>Coffee Break – Ground floor</i>
04.30 pm – 05.30 pm	<b>Fanny Kassel</b> Complete AdS manifolds in dimension 3.

### Tuesday March 6<sup>th</sup>

09.30 am – 10.00 am	<i>Coffee Break – Ground floor</i>
10.00 am – 11.00 am	<b>Robert Penner</b> Cell decomposition of homotopy Deligne-Mumford.
11.00 am – 11.30 am	<i>Coffee Break – Ground floor</i>
11.30 am – 12.30 pm	<b>Vladimir Fock</b> Geometric quantization of cluster varieties.
<b>12.30 pm – 03.00 pm</b>	<b>Lunch</b>
03.00 pm – 04.00 pm	<b>François Costantino</b> On spin networks and geometry.
04.00 pm – 04.30 pm	<i>Coffee Break – Ground floor</i>
04.30 pm – 05.30 pm	<b>Antonin Guilloux</b> Configurations of flags and representations of fundamental groups in $SL(3, \mathbb{C})$ .

### Wednesday March 7<sup>th</sup>

09.30 am – 10.00 am	<i>Coffee Break – Ground floor</i>
10.00 am – 11.00 am	<b>Howard Masur</b> The Weil-Petersson metric on Teichmüller space.
11.00 am – 11.30 am	<i>Coffee Break – Ground floor</i>
11.30 am – 12.30 pm	<b>Moon Duchin</b> Random surfaces.
<b>12.30 pm – 03.00 pm</b>	<b>Lunch</b>
03.00 pm – 04.00 pm	<b>Javier Aramayona</b> Homomorphisms between mapping class groups.
04.00 pm – 04.30 pm	<i>Coffee Break – Ground floor</i>
04.30 pm – 05.30 pm	<b>Andrés Sambarino</b> Asymptotic properties of a representation with equivariant maps.

**07.00 pm – 10.00 pm Conference Dinner – Tower Zamansky, 24<sup>th</sup> Floor, 4 Place Jussieu, 75005 Paris**

### Thursday March 8<sup>th</sup>

09.30 am – 10.00 am	<i>Coffee Break – Ground floor</i>
10.00 am – 11.00 am	<b>Maxim Kontsevich</b> Coordinates on representation spaces via wall-crossing.
11.10 am – 11.30 am	<i>Coffee Break – Ground floor</i>
11.30 am – 12.30 pm	<b>Yair Minsky</b> Uniform models for families of hyperbolic 3-manifolds.
<b>12.30 pm – 03.00 pm</b>	<b>Lunch</b>
03.00 pm – 04.00 pm	<b>Shinpei Baba</b> $2\pi$ -graftings and complex projective structures.
04.00 pm – 04.30 pm	<i>Coffee Break – Ground floor</i>
04.30 pm – 05.30 pm	<b>Bertrand Deroin</b> The degree of a $CP^1$ -structure.

### Friday March 9<sup>th</sup>

09.30 am – 10.00 am	<i>Coffee Break – Ground floor</i>
10.00 am – 11.00 am	<b>Serge Cantat</b> The mapping class group and the Cremona group.
11.00 am – 11.30 am	<i>Coffee Break – Ground floor</i>
11.30 am – 12.30 pm	<b>Jean-François Le Gall</b> A continuous limit for large random planar maps.