« Geometry and analysis of surface group représentations »  
Paris, January 3rd - March 30th, 2012

Workshop  
« on Moduli spaces of representations »  
February 6th – February 10th, 2012  
Amphitheater Hermite

11 rue Pierre et Marie Curie – Paris 5ème

Organizers

Bill Goldman (University of Maryland), Ser Peow Tan (National University of Singapore),  
Anna Wienhard (Princeton University)

Speakers

Francis Bonahon (University of Southern California)  
Martin Bridgeman (Boston College)  
Marc Burger (ETH Zurich)  
Daryl Cooper (University of California – Santa Barbara)  
Jeff Danciger (University of Texas – Austin)  
Martin Deraux (Institute Fourier – Grenoble)  
Guillaume Dreyer (University of Southern California)  
Elisha Falbel (University of Paris 6)  
Oscar Garcia-Prada (CSIC, Madrid)  
Olivier Guichard (University of Paris Sud, Orsay)  
Alessandra Iozzi (ETH Zurich)  
Misha Kapovich (University of California, Davis)  
Inkang Kim (KIAS, Korea)  
Bruno Klingler (University of Paris 7)  
Marina Logares (CSIC, Madrid)  
Greg McShane (Institute Fourier – Grenoble)  
Pierre Panang (ENS – Paris)  
John Parker (University of Durham)  
Adam Sikora (University of Buffalo)  
Tobias Strubel (ETH Zurich)  
Richard Wentworth (University of Maryland)  
Graeme Wilkin (National University of Singapore)  
Pierre Will (Institute Fourier – Grenoble)
Program

Monday February 6th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>09.00 am</td>
<td>Registration</td>
</tr>
<tr>
<td>09.30 am</td>
<td>Olivier GUICHARD Anosov Representations: Properties and Examples.</td>
</tr>
<tr>
<td>10.30 am</td>
<td>Francis BONAHDEN Coordinates of Fenchel-Nielsen type for the Hitchin component.</td>
</tr>
<tr>
<td>11.15 am</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>12.00 pm</td>
<td>Guillaume DREYER Geometric properties of Hitchin representations.</td>
</tr>
<tr>
<td>12.45 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>02.45 pm</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>03.00 pm</td>
<td>Greg McSHANE Four holed sphere pieces, pants and interpolating the forgetful map.</td>
</tr>
<tr>
<td>04.30 pm</td>
<td>Martin BRIDGEMAN Volume identities for hyperbolic manifolds with totally geodesic boundary.</td>
</tr>
<tr>
<td>06.00 pm</td>
<td>Cocktail – Ground Floor of IHP</td>
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Tuesday February 7th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09.30 am</td>
<td>Richard WENTWORTH On the cohomology of character varieties I.</td>
</tr>
<tr>
<td>10.30 am</td>
<td>Graeme WILKIN On the cohomology of character varieties II.</td>
</tr>
<tr>
<td>11.15 am</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>12.00 pm</td>
<td>Bruno KLINGLER On rigidity for representations of complex hyperbolic lattices.</td>
</tr>
<tr>
<td>12.45 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>02.45 pm</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>03.00 pm</td>
<td>Oscar GARCIA-PRADA Higgs bundles and representations of surface groups.</td>
</tr>
<tr>
<td>04.30 pm</td>
<td>Marina LOGARES Parabolic $U(p,q)$-Higgs bundles.</td>
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Wednesday February 8th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09.00 am</td>
<td>Daryl COOPER Degenerations and transitions of sub-geometries of projective geometry I.</td>
</tr>
<tr>
<td>10.00 am</td>
<td>Jeff DANCIGER Degenerations and transitions of sub-geometries of projective geometry II.</td>
</tr>
<tr>
<td>10.45 am</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>11.30 am</td>
<td>Inkang KIM Density of Zariski density for surface groups I.</td>
</tr>
<tr>
<td>12.30 pm</td>
<td>Pierre PANSU Density of Zariski density for surface groups II.</td>
</tr>
</tbody>
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Thursday February 9th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>09.30 am</td>
<td>Alessandra IOZZI Weakly maximal and causal representations of surface groups I.</td>
</tr>
<tr>
<td>10.30 am</td>
<td>Mark BURGER Weakly maximal and causal representations of surface groups II.</td>
</tr>
<tr>
<td>11.15 am</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>12.00 pm</td>
<td>Misha KAPOVICH Polyhedral complexes and topology of projective varieties.</td>
</tr>
<tr>
<td>12.45 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>02.45 pm</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>03.30 pm</td>
<td>Adam SIKORA Action-angle coordinates on character varieties of surfaces.</td>
</tr>
<tr>
<td>04.30 pm</td>
<td>Tobias STRUBEL Fenchel-Nielsen Coordinates for Maximal Representations.</td>
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</tbody>
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Friday February 9th

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>09.30 am</td>
<td>Pierre WILL Discrete groups in $PU(2,1)$ and spherical CR structures.</td>
</tr>
<tr>
<td>10.30 am</td>
<td>Elisha FALBEL $PGL(3,C)$ structures on 3 manifolds.</td>
</tr>
<tr>
<td>11.15 am</td>
<td>Coffee Break – Ground floor</td>
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<tr>
<td>12.00 pm</td>
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<td>02.45 pm</td>
<td>Coffee Break – Ground floor</td>
</tr>
<tr>
<td>03.30 pm</td>
<td>Martin DERAUX Real and complex hyperbolic geometry.</td>
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<tr>
<td>04.30 pm</td>
<td>John PARKER Fundamental domains for complex hyperbolic lattices.</td>
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