

## Analysis and Geometry of Random Shapes

### Monday January 7, 2019

- 8:30–9:20 *Check-In/Breakfast (Hosted by IPAM)*
- 9:20–9:30 *Welcome and Opening Remarks*
- 9:30–10:20 **Gregory Lawler** (University of Chicago)  
*Random walk loop measures, partition functions, and multiple SLEs*
- 10:30–11:00 *Break*
- 11:00–11:50 **Stephane Benoist** (Massachusetts Institute of Technology)  
*Conformally invariant measures on simple loops*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Christopher Bishop** (SUNY Stony Brook)  
*Random thoughts on random sets*
- 3:00–3:30 *Break*
- 3:30–4:20 **Amanda Turner** (Lancaster University)  
*Scaling limits for planar aggregation with subcritical fluctuations*
- 4:30–5:00 *Group Discussion*
- 5:00–6:30 *Poster Session & Reception (Hosted by IPAM)*

### Tuesday January 8, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Kari Astala** (Aalto University)  
*Part 1: Random tilings, free boundary problems and the Beltrami equation*
- 10:30–11:00 *Break*
- 11:00–11:50 **Malik Younsi** (University of Hawaii at Manoa)  
*Removability, rigidity of circle domains and Koebe's conjecture*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Yilin Wang** (ETH Zurich)  
*Part 1: Loewner energy via Brownian loop measure and action functional analogs of SLE/GFF couplings*
- 3:00–3:30 *Break*

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- 3:30–4:20 **Kari Astala** (Aalto University)  
*Part 2: Random tilings, free boundary problems and the Beltrami equation*
- 4:30–5:30 *Group Discussion*

### Wednesday January 9, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Ilya Binder** (University of Toronto)  
*The polynomial rate of convergence of critical interfaces*
- 10:30–10:45 *Break*
- 10:45–11:35 **Yilin Wang** (ETH Zurich)  
*Part 2: Loewner energy via Brownian loop measure and action functional analogs of SLE/GFF couplings*
- 11:45–12:00 *Break*
- 12:00–12:50 **Mathav Murugan** (University of British Columbia)  
*Quasisymmetric uniformization and heat kernel estimates*
- 1:00–2:00 *Lunch (on your own)*
- 2:00 *Afternoon Free*

### Thursday January 10, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–10:20 **Nikolai Makarov** (California Institute of Technology)  
*Calculus on Riemann surfaces*
- 10:30–11:00 *Break*
- 11:00–11:50 **Peter Lin** (University of Washington)  
*Conformal welding of dendrites*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Jun Kigami** (Kyoto University)  
*Weakly exponential measures and time changes of the Brownian motion.*
- 3:00–3:30 *Break*
- 3:30–4:20 **Daniel Meyer** (University of Liverpool)  
*Uniformization of quasitrees*
- 4:30–5:30 *Discussion: Future Directions*

## Friday January 11, 2019

- 8:30–9:30 *Check-In/Breakfast (Hosted by IPAM)*
- 9:30–9:50 **Atul Shekhar** (Royal Institute of Technology (KTH))  
*Some remarks on Loewner quasi-slits and other deterministic Loewner chains*
- 10:00–10:20 **Eveliina Peltola** (The University of Geneva)  
*Crossing Probabilities of Multiple Ising Interfaces*
- 10:30–11:00 *Break*
- 11:00–11:50 **Huy Tran** (Technische Universität Berlin)  
*Holomorphic motion of Loewner curves*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Nina Holden** (ETH Zürich)  
*Natural measures on random fractals*
- 3:00–3:15 *Break*
- 3:15–4:45 *Group Discussion*
- 4:45 *Conclusion*

