

## Interactions Between Analysis and Geometry Tutorials

### Tuesday March 12, 2013

- 9:30–11:00 *Check-In/Light Breakfast (Hosted by IPAM)*
- 11:00–11:50 **Nages Shanmugalingam** (University of Cincinnati)  
*Fine properties of classical Sobolev spaces, and upper gradients*
- 12:00–1:30
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:30 *Core Orientation with IPAM Staff*
- 2:30–3:20 **Juan Souto** (University of British Columbia)  
*Introduction to negatively curved spaces and Mostow rigidity, Part 1*

### Wednesday March 13, 2013

- 8:30–9:30 *Continental Breakfast*
- 9:30–10:20 **Kyle Kinneberg** (University of California, Los Angeles (UCLA))  
*Mostow rigidity: Further perspectives, Part 1*
- 10:30–11:00 *Break*
- 11:00–11:50 **Juan Souto** (University of British Columbia)  
*Introduction to negatively curved spaces and Mostow rigidity, Part 2*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Nages Shanmugalingam** (University of Cincinnati)  
*Newtonian functions on metric measure spaces, capacities*
- 3:00–3:30 *Break*
- 3:30–4:30 *Problem Session*



## Thursday March 14, 2013

- 10:00–11:00 *Continental Breakfast*
- 11:00–11:50 **Nages Shanmugalingam** (University of Cincinnati)  
*Geometric properties encoded in  $p$ -Poincaré inequalities*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Juan Souto** (University of British Columbia)  
*Introduction to negatively curved spaces and Mostow rigidity, Part 3*
- 3:00–3:30 *Break*
- 3:30–4:30 *Problem Session*

## Friday March 15, 2013

- 10:00–11:00 *Continental Breakfast*
- 11:00–11:50 **Juan Souto** (University of British Columbia)  
*Introduction to negatively curved spaces and Mostow rigidity, Part 4*
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:50 **Nages Shanmugalingam** (University of Cincinnati)  
*Other Sobolev-type function classes, and relation to Newtonian functions*
- 3:00–3:30 *Break*
- 3:30–4:30 **Kyle Kinneberg** (University of California, Los Angeles (UCLA))  
*Mostow rigidity: Further perspectives, Part 2*
- 4:30 *Conclusion*

