

Institute for Geometry and its Applications  
School of Mathematical Sciences  
University of Adelaide

## Workshop on New Currents in Geometry in Australia

16–18 November 2009

*supported by the Australian Mathematical Sciences Institute*

The workshop will be held on the University of Adelaide's North Terrace campus, in the Benham Lecture Theatre.

### Monday 16 November

9:00–9:45: **David Baraglia**, Oxford University  
*Coassociative submanifolds: deformations and fibrations*

Coffee

10:15–11:00: **James Borger**, Australian National University  
*Algebraic geometry to arithmetic geometry to absolute geometry*

11:15–12:00: **Emma Carberry**, University of Sydney  
*Bubble, bubble, toil and trouble: constant mean curvature surfaces and quaternionic holomorphic geometry*

Lunch

2:00–2:45: **Julie Clutterbuck**, Australian National University  
*Capillary surfaces for a compressible liquid*

Coffee

3:15–4:00: **Ilya Kossovskiy**, Australian National University  
*Classification of homogeneous CR-manifolds in dimension 4*

4:15–5:00: **Thomas Leistner**, University of Adelaide  
*Special holonomy in Lorentzian geometry*

### Tuesday 17 November

9:00–9:45: **Pengzi Miao**, Monash University  
*On critical metrics on compact manifolds with boundary*

Coffee

10:15–11:00: **Peter Milley**, University of Melbourne  
*Mom-technology and small volume hyperbolic 3-manifolds*

11:15–12:00: **Hao Yin**, University of Queensland  
*On stability of the hyperbolic space form under the normalized Ricci flow*

Lunch

2:00–2:45: **Todd Oliynyk**, Monash University  
*The Newtonian limit of general relativity*

Coffee

3:15–4:00: **Lawrence Reeves**, University of Melbourne  
*Genus for finitely presentable groups: compact 3-manifolds and link complements*

4:15–5:00: **Adam Rennie**, Australian National University  
*Geometry of singular spaces*

### Wednesday 18 November

9:00–9:45: **Peter van der Kamp**, La Trobe University  
*From integrable lattice equations to integrable flows*

Coffee

10:15–11:00: **Bryan Wang**, Australian National University  
*Geometric cycles and twisted index theory*

11:15–12:00: **Craig Westerland**, University of Melbourne  
*The stable topology of Hurwitz spaces*

Lunch

2:00–2:45: **Feng Xu**, Australian National University  
*Laplacian flow for  $G_2$ -structures*

Coffee