

# **Banff International Research Station**

for Mathematical Innovation and Discovery

### Computational Mathematics of Discrete Surfaces February 15-20, 2009

#### SCHEDULE

#### Sunday

16:00	Check-in begins (Front Desk - Professional Development Centre - open 24 hours)	
17:30 - 19:30	Buffet Dinner, Sally Borden Building	
20:00	Informal gathering in 2nd floor lounge, Corbett Hall	
	Beverages and small assortment of snacks available on a cash honour-system.	

#### Monday

7:00-8:45	Breakfast	
8:45 - 9:00	Introduction and Welcome to BIRS by BIRS Station Manager, Max Bell 159	
9:00–9:10	General Introduction	
9:10–9:50	Leonidas Guibas, Shape Decomposition using Modal Analysis	
9:50 - 10:30	Cindy Grimm, Cross-parameterization through Reducing Stress and Strain	
10:30 - 10:50	Coffee Break, 2nd floor lounge, Corbett Hall.	
10:50 - 11:30	Matthias Nieser, Stripe Parameterization	
11:30 - 13:00	Lunch	
13:00 - 14:00	Guided Tour of The Banff Centre; meet in the 2nd floor lounge, Corbett Hall	
14:00	Group Photo; meet on the front steps of Corbett Hall	
15:15-15:30	Coffee Break, 2nd floor lounge, Corbett Hall	
15:30 - 16:10	Brian Wyvill, Texture Mapping Implicit Surfaces	
16:10-16-50	Kai Hormann, Maximum Entropy Coordinate for Arbitrary Polytopes	
16:50 - 17:30	Tiberiu Popa, Detailed Geometric Capture of Garment Motion	
17:30 - 19:30	Dinner	

## Tuesday

7:00–9:00	Breakfast
9:10–9:50 9:50–10:30	David Gu, Discrete Ricci Flow for Surfaces and 3-manifolds Mario Botsch, FEM on Polyhedral Elements
10:30 - 10:50	Coffee Break, 2nd floor lounge, Corbett Hall
10:50–11:30	Martin Rumpf, Natural Time Discretization of Geometric Flows - A PDE optimization approach
$11:30{-}13:30$ $14:00{-}15:15$ $15:15{-}15:30$	Lunch Round table Coffee Break, 2nd floor lounge, Corbett Hall
$\begin{array}{c} 15:30{-}16:10\\ 16:10{-}16{-}50\\ 16:50{-}17:30 \end{array}$	Klaus Hildebrandt, Constrained-based Fairing of Curves and Surfaces Denis Zorin, High-order Discrete Functionals and Mixed Finite Elements Eitan Grinspun, Discrete Geometric Mechanics of Surfaces and Curves
17:30 - 19:30	Dinner

# Wednesday

7:00–9:00	Breakfast
9:10–9:50 9:50–10:30	Scott Schaefer, Simplification of Articulated Meshes Max Wardetzky, Discrete Morse Theory and Persistent Homology
10:30 - 10:50	Coffee Break, 2nd floor lounge, Corbett Hall
10:50 - 11:30	Richard Zhang, Delaunay Meshes
11:30–13:30	Lunch
	Free Afternoon
17:30 - 19:30	Dinner

## Thursday

7:00–9:00	Breakfast
9:10–9:50 9:50–10:30	Tamal Dey, Lifting the Curse of Slivers from Surface Reconstruction Johannes Wallner, Semidiscrete Surface Representations
10:30 - 10:50	Coffee Break, 2nd floor lounge, Corbett Hall
10:50 - 11:30	Jean-Marie Morvan, Curvature Measures of Discrete and Smooth Objects
11:30-13:30 15:15-15:30	Lunch Coffee Break, 2nd floor lounge, Corbett Hall
15:30-16:10 16:10-16-50 16:50-17:30	Pierre Alliez, Practical Isotropic Tetrahedral Mesh Generation tba tba
17:30 - 19:30	Dinner

Friday	
7:00-9:00	Breakfast
9:00-10:00	Informal Discussions
10:00-10:30	Coffee Break, 2nd floor lounge, Corbett Hall
10:30 - 11:30	Informal Discussions
11:30-13:30	Lunch

Checkout by 12 noon.

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#### ABSTRACTS (in alphabetic order by speaker surname)

Speaker: **Name** (Affiliation) Title: *Title* Abstract: Abstract Text

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