# Schedule of Workshop on Minimal Submanifolds and Related Topics

#### Monday, December 10:

8:45-9:00 Introduction and welcome to BIRS by BIRS Station Manager, Max Bell 159

9:00-9:50 **David Hoffman** (Stanford U.) Embedded Helicoidal Minimal Surfaces in  $\mathbb{R}^3$  and  $\mathbb{S}^2 \times \mathbb{R}$  10:00-10:30 Coffee Break

10:30-11:20 Jaigyoung Choe (KIAS) Capillary surfaces in a convex cone

11:30-1:30 Lunch

1:30-2:20 Yng-Ing Lee (National Taiwan U.) Special solutions to Lagrangian mean curvature flow

2:30-3:20 Dan Lee (Duke U.) The Riemannian Penrose inequality in dimensions less than 8

3:30-4:00 Coffee Break

4:00-4:50 Spiro Karigiannis (U. Oxford) Moduli spaces of calibrated cycles in  $G_2$  manifolds

## Tuesday, December 11:

9:00-9:50 Gang Tian (Princeton U.) A curvature estimate for Ricci flow in dimension 4

10:00-10:30 Coffee Break

10:30-11:20 William Meeks (U. Massachusetts) The classification of embedded minimal planar domains in  $\mathbb{R}^3$ . (joint work with Joaquin Perez and Antonio Ros)

11:30-12:00 Group Photo

12:00-1:30 Lunch

 $1:30-2:20\ \textbf{Pengfei}\ \textbf{Guan}\ (McGill\ U.)\ Is operimetric\ inequality\ of\ quermas sintegrals\ for\ starshaped\ domains$ 

2:30-3:20 Jiayu Li (ICTP) Symplectic surfaces in K-E surfaces

3:30-4:00 Coffee Break

4:00-4:50 Micah Warren (U. Washington) A priori estimates for special Lagrangian equations

## Wednesday, December 12:

9:00-9:50 Mario Micallef (U. Warwick) Comparison between Second Variation of Area and Second Variation of Energy of a Minimal Surface

10:00-10:30 Coffee Break

10:30-11:20 Leobardo Rosales (UBC) Minimal immersions with prescribed boundaries

11:30-1:30 Lunch

Free Afternoon

# Thursday, December 13:

9:00-9:50 **Joel Spruck** (Johns Hopkins U.) A half-space theorem for complete embedded cmc 1/2 surfaces in  $H^2 \times R$ 

10:00-10:30 Coffee Break

10:30-11:20 **Bo Guan** (Ohio State U.) Complete conformal metrics of negative Ricci curvature on manifolds with boundary

11:30-1:30 Lunch

1:30-2:20 **Greg Galloway** (U. Miami) Stability and rigidity of marginally trapped surfaces, and the topology of black holes

2:30-3:20 Adrian Butscher (Stanford U.) New constructions of submanifolds of the sphere which are critical points of the volume functional

3:30-4:00 Coffee Break

4:00-4:50 Justin Corvino (Lafayatte College) Geometry and the Einstein Constraint Equations

#### Friday, December 14:

9:00-9:50 **Yuanlong Xin** (Fudan U.) Curvature estimates for minimal submanifolds of higher codimension 10:00-10:50 **Marianty Ionel** (U. Toledo) Constructions of special Lagrangian submanifolds