Geometric Partial Differential Equations
Équations différentielles partielles géométriques
(Org: **Siyuan Lu** and/et **Yi-Lin Tsai** (McMaster University))

KENNETH DEMASON, McMaster University

ROBERT HASLHOFER, University of Toronto
Singularities of mean curvature flow in $\mathbb{R}^4$

I will first survey the theory of mean curvature flow through singularities in $\mathbb{R}^3$. Then, I will discuss our recent classification of all noncollapsed singularities in $\mathbb{R}^4$. This is joint work with Kyeongsu Choi.

FREID TONG, University of Toronto

YULUN XU, University of Toronto
viscosity solution to complex Hessian quotient equation.

We prove the existence of viscosity solutions to complex Hessian equations on compact Hermitian manifolds, assuming the existence of a strict subsolution in the viscosity sense. The results cover the complex Hessian quotient equations. This generalizes our previous results, where the equation must satisfy a determinant domination condition. This is a joint work with Prof. Jingrui Cheng.