

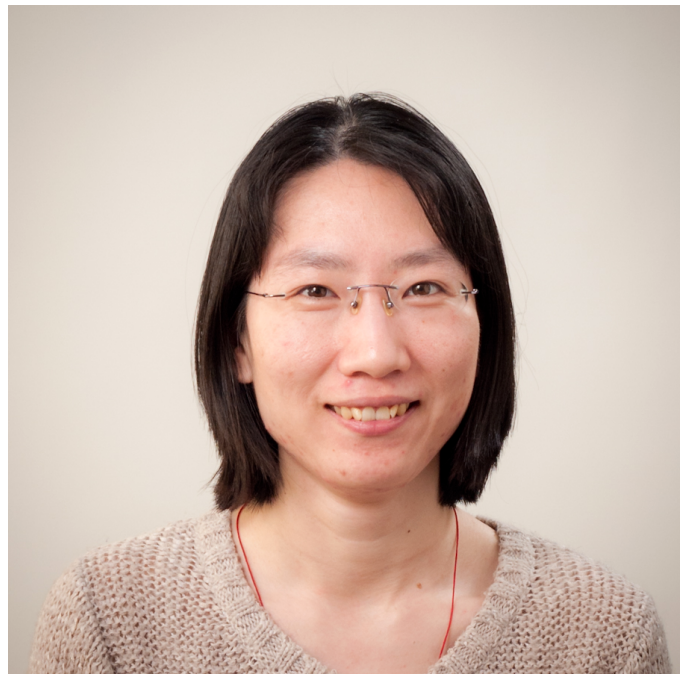
# The Oliver Club

[www.math.cornell.edu/~oliver/](http://www.math.cornell.edu/~oliver/)

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## ***Rigidity of Asymptotically Conical Shrinking Ricci Solitons***

*Shrinking Ricci solitons generalize positive Einstein manifolds and play a central role in the analysis of singularities of the Ricci flow. At present, essentially all known complete noncompact examples are either locally reducible as products or possess conical structures at infinity. I will describe recent joint work with Brett Kotschwar in which we investigate the rigidity of such conical structures and show that, if two shrinking solitons are asymptotic to the same cone along some end of each, then the solitons must actually be isometric on some neighborhoods of infinity of these ends.*



*As an application, we prove that the only complete shrinking soliton asymptotic to a rotationally symmetric cone is the Gaussian soliton. The main tools are the PDE-ODE technique and the Carleman type estimate in the geometric setting.*

**Thursday, January 30, 2014**  
**at 4:00 PM in 532 Malott Hall**

Refreshments will be served at 3:30 PM in the Mathematics Department lounge (532 Malott Hall).