1135-53-607 **Shengwen Wang*** (swang@math.jhu.edu). *Hausdorff stability of round spheres under small-entropy perturbation.*

Colding-Minicozzi introduced the entropy functional on the space of all hypersurfaces in the Euclidean space when studying generic singularities of mean curvature flow. It is a measure of complexity of hypersurfaces. Bernstein-Wang proved that round spheres $\mathbb{S}^n$ minimize entropy among all closed hypersurfaces for $n \leq 6$, and the result is generalized to all dimensions by Zhu. Bernstein-Wang later also proved that the round 2-sphere is actually Hausdorff stable under small-entropy perturbations. I will present in this talk the generalization of the Hausdorff stability to round hyper-spheres in all dimensions. (Received September 18, 2017)