

XIAODONG WANG  
(MICHIGAN STATE UNIVERSITY)

## **Boundary Effects of Ricci Curvature**

On a compact Riemannian manifold with boundary, it is interesting to study how the Ricci curvature of the interior affects the geometry of the boundary. I will first talk about integral inequalities for functions defined solely on the boundary, and apply them to obtain geometric inequalities involving the total mean curvature. Then I will discuss related rigidity questions and prove Ricci curvature rigidity results for manifolds with boundary. This is joint work with Pengzi Miao.