1114-35-155Yuanzhen Shao* (shao92@purdue.edu), 150 N University St., West Lafayette, IN 47907.Degenerate and singular elliptic operators on manifolds with singularities.

In this talk, we will introduce the concept of manifolds with singularities and study a class of elliptic differential operators that exhibit degenerate or singular behavior near the singularities. Based on this theory, we investigate the Yamabe flow with "bad" initial metrics. (Received August 23, 2015)