1077-AI-1435 Sajjad Lakzian (SLakzian@gc.cuny.edu) and Christina Sormani* (sormanic@member.ams.org). Distances between Riemannian Manifolds.

Given two Riemannian manifolds, one may measure the distance between them using the Lipschitz, Gromov-Hausdorff and Intrinsic Flat distances. We will present new approaches to estimating these distances given information on subdomains in the manifolds. Then we will apply these results to understand the Gromov-Hausdorff and Intrinsic Flat limits of sequences of Riemannian manifolds which converge smoothly away from singular sets. (Received September 19, 2011)