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Chao Li* (rchlch@stanford.edu), 380 Serra Street, Sloan Hall, Stanford University, Stanford, CA 94305. *Positive scalar curvature in singular spaces.*

Motivated by the study of positive scalar curvature (PSC) on singular Riemannian manifolds, we show that edge singularities along codimension-2 submanifolds do not affect its Yamabe type, as long as the cone angles are all no larger than 2π . In three dimensions, we show the same for edge-singularities along 1-skeletons and, in particular, we show that uniformly Euclidean point singularities are “removable” in the study of PSC metrics on 3-manifolds. We also discuss a comparison theorem for manifolds with positive scalar curvature. Part of this talk is based on joint work with Christos Mantoulidis. (Received September 20, 2017)