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Luca Spolaor* (lspolaor@ucsd.edu), **Otis Chodosh** and **Max Engelstein**. *The Riemannian Quantitative Isoperimetric Inequality*.

In this talk I will discuss the Riemannian quantitative isoperimetric inequality. I will show that direct analogue of the Euclidean quantitative isoperimetric inequality is—in general—false on a closed Riemannian manifold. In spite of this, we can prove that the inequality is true generically. Moreover, we show that a modified (but sharp) version of the quantitative isoperimetric inequality holds for a real analytic metric, using the Łojasiewicz–Simon inequality. A main novelty of the present work is that in all our results we do not require any a priori knowledge on the structure/shape of the minimizers. (Received August 29, 2019)