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Farbod Shokrieh and **Chenxi Wu*** (wuchenxi2013@gmail.com), 434 Hill Center, Piscataway, NJ 08854. *Kazhdan's theorem on metric graphs.*

There is an analogy between the study of metric graphs and the study of Riemann surfaces, and a question is to construct uniformization theorem for metric graphs which would require a concept of “hyperbolic metric” on it. With Farbod Shokrieh, using the technique of L^2 cohomology developed by Lueck, we found a graph theoretic analogy of a classical result by Kazhdan on the limit of canonical, or Arakelov metric under a tower of normal covers, which indicates that the limiting metric might be such a candidate. I will also discuss generalizations of it to higher dimensional simplicial complex and some further questions. Parts of the results in this project have been published at doi: 10.1007/s00222-018-0838-5 and doi: 10.1515/crelle-2019-0007. (Received June 26, 2019)