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Sze-Man Ngai* (smngai@georgiasouthern.edu), Department of Mathematical Sciences, Georgia Southern University, Statesboro, GA 30460-8093, **Wei Tang** (tangwei19910525@126.com), College of Mathematics and Computer Science, Hunan Normal University, Changsha, Hunan 410081, Peoples Rep of China, and **Yuanyuan Xie** (xieyuanyuan198767@163.com), College of Mathematics and Computer Science, Hunan Normal University, Changsha, Hunan 410081, Peoples Rep of China. *Wave propagation speed on fractals.*

We study the wave propagation speed problem on fractals that are not post-critically finite. We extend Y. T. Lee's result on infinite propagation speed to include these fractals. We also obtained a sufficient condition for finite wave propagation speed that depends on the self-similar measure. Heat kernel estimates play a crucial role in these investigations. We apply our results to the classical infinite Bernoulli convolutions and other fractals. This is a joint work with Wei Tang and Yuanyuan Xie. (Received January 24, 2016)