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Patricia Alonso Ruiz* (patricia.alonso-ruiz@uconn.edu), Storrs, CT, and **Yuming Chen, Haotian Gu, Robert S. Strichartz** and **Zirui Zhou**. *Analysis on hybrid fractals*.

In this talk we discuss resistance (energy) forms and Laplacians on a class of fractals constructed by gluing different fractal pieces in a specific manner. In particular, we discover energy forms that, despite of being constructed in a rather natural way, do not fully “capture” the whole geometric structure of the underlying fractal. We will present this phenomenon in a specific example for which we will also analyze the spectrum of the associated Laplacian and its asymptotic behavior. (Received February 02, 2019)