1113-28-6 **Palle E.T. Jorgensen\*** (`palle-jorgensen@uiowa.edu`), Palle Jorgensen, Math MLH, Iowa City, IA 52242. *Fractal boundaries arising from infinite networks.*

We study Cantor spaces which arise as limits of infinite discrete models; specifically infinite weighted graphs. Examples include electrical networks with resistors; the network Laplacian plays a role; from it we get harmonic functions, and harmonic analysis. The Cantor spaces we study serve as boundaries; for example, Poisson boundaries, Shilov boundaries, Martin boundaries, path-space boundaries, and metric boundaries. The metric we consider is called the resistance-metric. In the talk we outline new results in these areas, and their interconnections. (Received February 03, 2015)