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Luke Rogers* (luke.rogers@uconn.edu). *Magnetic operators on resistance spaces.*

In recent years a number of approaches have been developed for studying differential 1-forms on fractal spaces that admit a resistance form. This has enabled the study of certain differential equations which are of interest in physics; in particular, Hinz and Teplyaev have established the essential self-adjointness of magnetic Schrödinger operators on the space $L^2(\nu)$, where ν is the energy, or Kusuoka, measure associated to the resistance form. I will report on recent results on the self-adjointness of magnetic operators on $L^2(\mu)$, where μ is a Radon measure on the resistance space. This is joint work with Michael Hinz (Bielefeld). (Received September 17, 2013)