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Marius V Ionescu* (ionescu@usna.edu), United States Naval Academy, Department of Mathematics, 572C Holloway Road, Chauvenet Hall, Annapolis, MD 21402, and **Kasso Okoudjou** and **Luke G Rogers**. *Some properties of Schrödinger Operators on the Sierpinski Gasket*. Preliminary report.

A generalized Schrödinger operator with potential χ on the Sierpinski gasket K is an operator of the form $H = p(-\Delta) + [\chi]$, where $p : (0, \infty) \rightarrow \mathbb{R}$ is a measurable function. We consider Δ to be the Laplacian on the Sierpinski gasket defined by the self-similar measure on K . We show that Schrödinger operators on K with continuous symbol p and continuous potential χ satisfy a weak and a strong maximum principle. As an ingredient in the proof of the strong maximum principle, we prove a version of the Hopf lemma for Schrödinger operators on K . We describe next the asymptotics of clusters of eigenvalues of a generalized Schrödinger operator in terms of the symbol p . Our latter results generalize earlier work of Okoudjou and Strichartz. This talk is based on joint work with Kasso Okoudjou and Luke G. Rogers. (Received February 02, 2016)