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Saša Kocić* (skocic@olemiss.edu), P.O. Box 1848, University, MS 38677. *Spectral theory of Schrödinger operators over circle maps with a singularity.*

I will discuss renormalization and the geometry of dynamical partitions of circle maps with a singularity — i.e., circle diffeomorphisms with a singular point where the derivative has a jump discontinuity (maps with a break) or vanishes (critical circle maps) — and an application to spectral theory of Schrödinger operators over them. As a corollary of our main result we obtain that, for a set of irrational numbers $S \subset (0, 1)$ and every sufficiently smooth such map T , with rotation number $\rho \in S$, and an invariant measure μ , and μ -almost all $x \in T^1$, the spectrum of the corresponding Schrödinger operator $H(T, V, x)$ is purely continuous, for every Hölder-continuous potential V . (Received September 19, 2021)