

Quantized open chaotic systems

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I will review some results in the spectral theory of "open quantum chaos", applicable in the following situations:

- scattering wave systems with a fractal hyperbolic repeller
- damped waves on a surface of negative curvature.

In both situations, the "spectrum" is made of complex eigenvalues, some properties of which (spectral gap, density of states) can be connected with classical invariants of the chaotic motion.