Parameter-dependent spectral statistics of quantum graphs

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Parameter-dependent spectral statistics of totally connected quantum graphs are studied. We consider two different types of spectra of quantum graphs. The first one is the spectrum of the Laplacian on a metric graph, and the second one is the spectrum (eigenphases) of the scattering matrix of a quantum graph. We found out that in both cases the parameter-dependent spectral statistics are very similar to each other.

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