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**Steve Zelditch\*** ([zelditch@math.northwestern.edu](mailto:zelditch@math.northwestern.edu)), Evanston, IL 60208, and **Boris Hanin**.

*Interface asymptotics for spectral projections.*

Interfaces arise in spectral problems in several ways: For semi-classical Schrodinger operators at a fixed energy level, the interface in physical space is the caustic, i.e. the boundary between the allowed and forbidden regions. In phase space, the interface is at the energy surface. In boundary problems, the boundary is the interface. Spectral projections for the fixed energy level exhibit scaling asymptotics around the interface that we conjecture to be universal. For the isotropic harmonic oscillator, the scaling limit is a dimension-dependent Airy kernel which coincides with the Tracy-Widom Airy kernel in dimension 3. This is joint work with B. Hanin and P. Zhou (Received February 27, 2017)