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*Random operators at the edge*

The density of states of a random GUE matrix at the edge behaves like  $x^{1/2}$ . The large- $n$  limit of this matrix is the Stochastic Airy Operator, whose ground state has Tracy-Widom distribution. The Painleve II formulas for this distribution can be derived using the random operator.

The density of states of some natural classes of matrix models have different power law at the edge. I will describe the conjectured limiting operators and state some open problems about their behavior.