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thomas bloom* (bloom@math.toronto.edu), 40 St George St., Toronto, Ontario M5S2E4,
Canada. *Large deviation for certain ensembles related to Hermitian random matrices.*

We present a method, using potential theory, to obtain a large deviation principle for the empirical measure of a random point in certain ensembles. In addition to Hermitian random matrix ensembles the method applies to Nikishin or biorthogonal ensembles and also ensembles based on Riesz potentials. A common feature of these ensembles is a related energy functional. The rate function of the large deviation is given in terms of the energy functional. This is joint work with N. Levenberg, F. Wielonsky and V. Totik. (Received January 23, 2017)