ABSTRACT

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Title: *Dyson's Gases for Calogero–Moser Random Matrices*

Abstract:

We introduce new classes of random matrix ensembles whose statistical eigenvalue−microstructure is intermediate between GOE−ensembles and diagonal random matrices. Except the results of analytical derivations for LS−statistics and spectral rigidity we will present a special variant of Dyson's gas whose thermal−equilibrium properties are in a deep consonance with those detected in random matrix spectra. Applicability of the results in the quantitative socio−dynamics will be discussed in detail.