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Random Interactions on 2-Level Systems¹ DECLAN MULHALL, Universty of Scranton — The systematics of the regularities of the spectra of systems of N particles on 2 spin-j levels interacting under random 2-body interactions with certain global symmetries exhibit regularities. A statistical theory is developed to explain these regularities, based on the statistical mechanics of a quantum gas. A comparison is made with the Interaction Boson Model.

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