Canadian Association of Physicists
Association canadienne des physiciens et physiciennes

Contribution ID: **680** Type: **Invited Speaker / Conférencier(ère) invité(e)**

(I) Chaos and the spectrum on Moduli space

Wednesday 9 June 2021 15:45 (5 minutes)

We numerically analyze the spectrum of the Laplacian on the moduli space of a genus zero Riemann surface with four punctures via a perturbative expansion of the path integral of Liouville theory. Our results furnish evidence that the eigenvalues obey the statistics of a random matrix in the Gaussian Orthogonal Ensemble. We comment on possible implications for the quantum geometry of Riemann surfaces and quantum gravity in anti–de Sitter space. Based on work with A. Maloney and T. Numasawa.

Author: Prof. HARRISON, Sarah (McGill University)

Presenter: Prof. HARRISON, Sarah (McGill University)

Session Classification: W3-2 Mathematical and Theoretical Physics (DTP) / Physique mathématique et physique théorique (DPT)

Track Classification: Theoretical Physics / Physique théorique (DTP-DPT)