## 2018 CAP Congress / Congrès de l'ACP 2018



Contribution ID: 2039 Type: Poster Competition (Graduate Student) / Compétition affiche (Étudiant(e) 2e ou 3e cycle)

## POS-47 Anarchy and rephasing invariants for neutrinos

Tuesday 12 June 2018 18:04 (2 minutes)

The implications of the anarchy principle on CP violation in the lepton sector are investigated. A systematic method is introduced to compute the probability density functions for the CP-violating rephasing invariants of the PMNS matrix from the Haar measure relevant to the anarchy principle. Contrary to the CKM matrix which is hierarchical, it is shown that the Haar measure, and hence the anarchy principle, are very likely to lead to the observed PMNS matrix. Predictions on the CP-violating Dirac and Majorana rephasing invariant are also obtained. They are in agreement with the experimental hint from T2K for the normal (or inverted) hierarchy.

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**Session Classification:** PPD Poster Session & Finals: Poster competition and Mingle session with Industrial partners/employers (5) | Session d'affiches PPD et finales: Concours d'affiches et rencontres avec partenaires industriels et employeurs (5)

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