

Stanford



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Bio

BIO

Hi! I'm a postdoctoral research associate at SLAC and Stanford. My current research focuses on the role of neutrino oscillations in core-collapse supernovae and binary neutron star merger remnants.

EDUCATION AND CERTIFICATIONS

- PhD, Niels Bohr Institute - University of Copenhagen , Astroparticle Physics (2022)
- MSc, Lund University , Theoretical Physics (2019)

Publications

PUBLICATIONS

- **Neutrino Flavor Pendulum Reloaded: The Case of Fast Pairwise Conversion** *PHYSICAL REVIEW LETTERS*
Padilla-Gay, I., Tamborra, I., Raffelt, G. G.
2022; 128 (12): 121102
- **Neutrino fast flavor pendulum. II. Collisional damping** *PHYSICAL REVIEW D*
Padilla-Gay, I., Tamborra, I., Raffelt, G.
2022
- **A three Higgs doublet model with symmetry-suppressed flavour changing neutral currents** *JOURNAL OF HIGH ENERGY PHYSICS*
Das, D., Ferreira, P. M., Morais, A. P., Padilla-Gay, I., Pasechnik, R., Rodrigues, J.
2021
- **Multi-dimensional solution of fast neutrino conversions in binary neutron star merger remnants** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
Padilla-Gay, I., Shalgar, S., Tamborra, I.
2021
- **Neutrino propagation hinders fast pairwise flavor conversions** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
Shalgar, S., Padilla-Gay, I., Tamborra, I.
2020
- **Series solutions of single-field models of inflation**
Jaramillo-Perez, V. M., Padilla-Gay, I., Diez-Tejedor, A., Urena-Lopez, L. A., Hernandez, H., Chacon, G., Sabido, M.
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