Contribution ID: **81** Type: **not specified**

Low Temperature Baryogenesis

Friday, 4 July 2025 09:30 (30 minutes)

We explore models of baryogenesis at temperatures below the electroweak scale. In particular, we focus in a realization which makes clear the connection between low temperature baryogenesis and highly displaced vertices. The model involves the out of equilibrium decay of Majorana fermions at post-sphaleron temperatures. We present the phenomenological constraints from flavor, neutron oscillations and collider physics. We detail predictions for the displaced vertex phenomenology at various facilities either approved of being proposed. Finally, we present a version of the model where baryon number is spontaneously broken, and explore the phenomenology associated with the resulting pNGB.

Presenter: BURDMAN, Gustavo

Session Classification: Morning session