

Probing Left-Right Symmetry at Energies High and Low

Restoration of left-right symmetry at high energy scales provides a well-motivated extension of the Standard Model, which has been scrutinized over the past few decades and that can be viewed as the intermediate step towards grand unification. In my talk, I will investigate whether these models can be probed via the search for a stochastic gravitational wave background induced by the left-right phase transition. A prerequisite for this kind of gravitational wave production is a first-order phase transition, occurrence of which can be found in a significant portion of the parameter space. At the same time, I will discuss constraints that can be imposed on left-right symmetric models by double beta decay experiments or colliders.

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