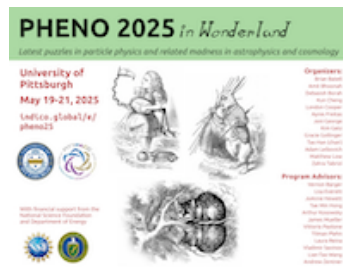


Phenomenology 2025 Symposium



Contribution ID: 4

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W' Searches at Future Muon Collider

Monday 19 May 2025 16:30 (15 minutes)

Discovering that neutrinos have mass has left question regarding their origin. One possible model of their origin are Left-Right models, which add a $SU(2)$ group with a right handed neutrino and a new heavy charged boson W' . Searches at the LHC for this heavy boson have not been successful, meaning that larger and more energetic colliders are needed. This analysis searches for the W' at 6.5 TeV at a 20 TeV muon collider, and is complemented by Machine Learning algorithms. Lorentz Boost Networks and Deep Neural Networks are used and compared, both having a good discrimination between the signal and background events.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

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Presenter: SOTO ALCARAZ, Miguel Angel

Session Classification: New Physics at Future Colliders

Track Classification: New Physics at Future Colliders