

Searching for New Physics with Plasma Wakefield Colliders

Thursday 24 April 2025 16:54 (22 minutes)

Plasma wakefield acceleration offers a new path toward building compact, high-energy colliders, with the potential to open up fresh opportunities for new physics searches. In this talk, I'll introduce the basic ideas behind the technology and discuss what a future plasma wakefield collider could look like. I'll then explore its reach for discovering new particles using simple benchmark models, and highlight some of the key challenges that still need to be addressed.

Author: OPFERKUCH, Toby (CERN)

Presenter: OPFERKUCH, Toby (CERN)

Session Classification: BSM

Track Classification: Plenary talk