

Contribution ID: 350

Type: Oral Presentation

Who needs non-hermitian quantum mechanics?

Wednesday, 5 July 2023 08:40 (1 hour)

I'll introduce some basic quantum mechanics and simple models from nuclear physics to show how and why non-hermitian operators enter into quantum mechanics in the first place. This will be followed by discussing how one can construct a fully self-consistent non-hermitian quantum mechanical framework and how this relates to so-called PT-symmetric quantum mechanics. I'll conclude by discussing how this work has impacted recent work in optics and other fields of physics.

Apply to be considered for a student; award (Yes / No)?

N/A

Level for award; (Hons, MSc, PhD, N/A)?

N/A

Primary author: GEYER, Hendrik (Stellenbosch University)

Presenter: GEYER, Hendrik (Stellenbosch University)

Session Classification: Plenary 3

Track Classification: Track H - Plenaries