



Nathan Harshman

American University, Washington DC, USA

A Review of One-Dimensional Anyons

What is an anyon? Answering that question requires understanding particle statistics, indistinguishability, and topological symmetries. In two dimensions, quasiparticles with anyonic statistics that interpolate between fermions and bosons have been observed in the fractional quantum Hall effect. These two-dimensional anyons have a unified interpretation in terms of topological exchange statistics, Haldane exclusion statistics, conformal symmetry, and gauge theory. However, the picture is much murkier in one dimension, where particles must coincide to exchange making it harder to separate dynamical effects from topological effects. This talk will review some one-dimensional anyon models and evaluate them from the perspective of topological exchange statistics.

The event is part of the group seminar of AG Eckardt at TU Berlin and will take place in a hybrid format. For information on how to access the event, please contact: henning.reinken@itp.tu-berlin.de

Monday, 13.06.2022 · 14:15h · ER 136/via Zoom

Technische Universität Berlin · Institut für Theoretische Physik · Hardenbergstraße 36 · 10623 Berlin

www.itp.tu-berlin.de/sfb910