Glide symmetry protected topological phases in interacting bosons and fermions

FUYAN LU, BOWEN SHI, YUAN-MING LU, Ohio State Univ - Columbus — We classify and construct glide symmetry protected topological (GSPT) phases of interacting bosons and fermions in three dimensions. We focus on the systems with U(1) charge conservation and/or time reversal symmetry. Using a stacked plane construction, we also identify the anomalous surface topological orders of these GSPT phases, one example being the hourglass fermions in three-dimensional glide-protected topological insulator.

1The Ohio State University

Fuyan Lu
Ohio State Univ - Columbus

Date submitted: 08 Nov 2016

Electronic form version 1.4