

Introduction to the physics of anyons with Majorana fermions as an example

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I give a pedagogical introduction to anyon physics in two spatial dimensions, its relation to topology, and discuss how anyons can arise in many-body systems. In the second part, these general concepts will be illustrated with Majorana fermions, where I also show how one can realize them in atomic system and use them for quantum computing.

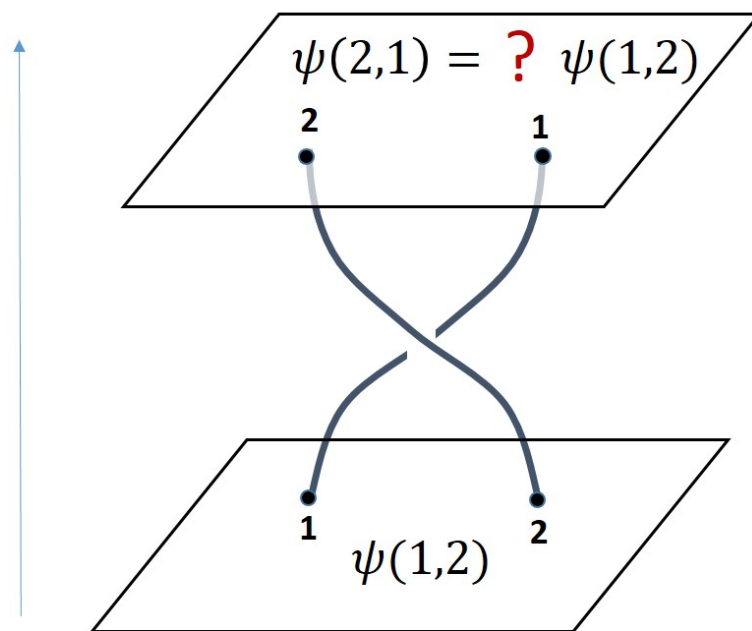


Figure 1: Exchanging two indistinguishable particles in two spatial dimensions.