Yet Another Way to Measure Majorana Nonlocality

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There are more and more Majorana experiments on available, so an obvious question is 'what is the next step?'. In an attempt to address this question I am going to discuss what is the minimal way to make a falsifiable proof that an experimental device contains Majoranas, and that they have nonlocal properties. The setup that achieves both of these aims is a two arm interferometer, measuring transport through Majoranas due to a finite Coulomb energy. Controllably removing this nonlocal coupling suppresses interference signal, and allows to distinguish the Majorana signal from regular Aharonov-Bohm effect. This setup also has an additional counter-intuitive benefit of not requiring creation of decoupled Majoranas despite it detects nonlocal coupling between them.