

Problems Day 3

PhD school: Vietri Sul Mare 2018

Problem 1: Read ...

... these publications describing some of the relevant experiments (or take your pick which ones you find most interesting)

- V. Mourik et al., *Science* **336**, 1003 (2012) – this first reported the observation of zero-bias peaks in a nanowire system
- S. Nadj-Perge et al., *Science* **346**, 602 (2014) – this reported evidence for Majoranas in an alternative platform, magnetic adatoms on a conventional superconductor
- S. M. Albrecht et al., *Nature* **531**, 206 (2016) – this reported evidence for Majoranas in nanowire systems based on Coulomb blockade physics of Majorana islands
- H. Zhang et al., *Nature* **556**, 74 (2018) – this paper reports evidence for zero bias peaks in nanowire systems with quantized peak height of $2e^2/h$