
Majorana fermions on a chip

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Abstract

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A year ago we reported in Science magazine our experiment on "Signatures of Majorana fermions in Hybrid Superconductor-Semiconductor Nanowire Devices". Since then the data has been reproduced and extended by others and also by ourselves. Theoretical analyses have pointed at both alternative explanations as well as strengthening the Majorana interpretation. Also new experimental checks have been proposed including the ultimate check in terms of a minimal scheme for braiding to demonstrate non-Abelian statistics. I will give an overview and an outlook.

Background information and published work can be found at kouwenhovenlab.tudelft.nl.

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