



Thomas Johansson  
Legal Office, Master of Laws  
Secretary of the Practice Committee  
University of Copenhagen

14 February 2022

To the members of the Practice Committee,

I am writing in response to your letter from 20 January of this year, regarding the detailed reply by Prof. Charles Marcus to the scientific and ethical concerns raised about his 2020 *Science* paper, “Flux-induced topological superconductivity in full-shell nanowires.” We have closely examined the reply and also discussed it with Professors Sergey Frolov and Vincent Mourik, who brought the original concerns to our attention. This discussion has reinforced our original belief that only a transparent, independent panel of scientists with deep expertise in the specific subject matter of Majorana physics can constructively assess the competing claims in the complaint and the reply. Professors Frolov and Mourik concur and will cooperate as needed with such an expert panel.

I would implore you, if you haven’t already, to read through the report of an analogous panel of experts convened by the University of Delft to adjudicate concerns raised about a paper published by Prof. Leo Kouwenhoven’s group on Majorana physics in *Nature*. The full report can be found here <https://zenodo.org/record/4545812#.Ygqvbc-caqk> and among other things contextualizes the reasons why the search for Majorana signatures has been exceptionally challenging and controversial. The point is not that there are precise, one-to-one parallels between the problems with the *Nature* paper and the concerns raised about Prof. Marcus’ paper in *Science*. Rather, the essential point is that questions about the parameter space across which data should be analyzed and plotted, the signal-to-noise thresholds for attributing significance to findings, and the number of physical devices tested are extremely complex and nuanced. What we seek to understand, in the case of Prof. Marcus’ paper, is whether good-faith reviewers and readers would have drawn different conclusions about the statistical validity of the findings if a fuller range of data had been included in the paper at the outset. Only true experts in this highly technical subject matter are well-placed to make that judgment. The fact that a different group of scientists tried and failed to reproduce the results in Prof. Marcus’ paper (reported last year in *Science*, <https://www.science.org/doi/10.1126/science.abf1513>) reinforces the need to reach a clear, thorough conclusion about the propriety of the original analysis for the wider scientific community.

I hope to have convinced you to convene a transparent, independent panel of external experts in keeping with the admirable precedent set by the University of Delft. I would be happy to answer any further questions you may have.

Sincerely,

A handwritten signature in black ink that reads "Jake Yeston".

Jake S. Yeston, PhD  
Editor, *Science*