To: <u>editorial@kalmbach.com</u>

Attn.: Editorial Director Steve George <u>sgeorge@discovermagazine.com</u> Copy by certified mail to: 21027 Crossroads Circle, Waukesha, WI 531

Kalmbach Publishing Co. CEO Dan Hickey <u>dhickey@kalmbach.com</u>

Cc: editorial@discovermagazine.com

Cc: Dr. David H. Sharp, Los Alamos National Laboratory sharp.davidh@gmail.com

To the editors:

Your response to the information we provided is extremely disappointing. Widely accepted scientific standards require that research findings be correctly attributed, especially important new predictions or findings. In our opinion, and that of colleagues with whom we have shared this correspondence, journalistic standards of accuracy and integrity require that readers be informed appropriately, and not misled through inaccuracies or omissions. Errors of omission are normally corrected, quite routinely, when brought authoritatively to editors' attention.

We note for example the published policy of the Washington Post [emphases added]:

"Fairness results from a few simple practices: *No story is fair if it omits facts of major importance or significance. Fairness includes completeness.*"

"No story is fair if it *consciously or unconsciously misleads or even deceives the reader*. Fairness includes honesty — leveling with the reader."

Such generally-accepted journalistic policy surely pertains to the scientific community. Should the present situation remain unresolved in a fair way, we are reluctantly committed to sharing Discover Magazine's apparent policy of unwillingness to correct its unfair omissions. But we very much hope you will reconsider, and update both posted articles to correct for the omissions.

We summarize our concern and complaint:

You published two articles, five months apart, featuring the prediction and empirical discovery of the quantum particles termed "anyons." The second of the articles is a fairly extensive exposition. In both articles you attributed their theoretical prediction to Frank Wilczek alone, and included his extended comments. You made no mention at all of the theoretical physicists who independently predicted such particles prior to Professor Wilczek: i.e., Jon Leinaas and Jan Myrheim (1977), and Gerald Goldin, Ralph Menikoff, and David Sharp (1980-81).

Any reader would reasonably conclude from your articles that the prediction came first and only from Professor Wilczek. Your justification for declining to post updates – that neither article explicitly claimed Professor Wilczek was the "first" or the "exclusive" person to predict particles

with these properties – is disingenuous and manifestly unfair. The implication that Professor Wilczek was the first and only one to make this prediction is implicit in the entirety of both reports.

We do not know if you consulted with the author of either article. We would of course be glad to provide information and discuss the topic further with them.

After your first article appeared (December 2020), you disregarded two cordial communications (January 22 and February 15, 2021) from Gerald Goldin providing the correct information. Without responding to or acknowledging either of these communications, you published your more extensive article on the topic (May 2021), repeating and continuing the systematic omissions.

There is an important difference between omissions we have assumed to be inadvertent, and an intentional policy leaving a false impression in readers. For you to update the two posted articles now is straightforward. All that is needed is a sentence or two in each, stating that an earlier version of the article inadvertently omitted mention of two prior, independent predictions of the particles that came to be known as "anyons," including the names and possibly the nationalities of the authors. We have provided the scientific references in earlier communications. We hope you will reconsider your position, and choose accuracy and integrity over expedience in scientific journalism.

Important discoveries in science have been frequently misattributed to already-famous white male scientists. Surely you must know this. It is a dynamic that has done serious, long-lasting damage to participation and deserved advancement in STEM fields by women and people of color. An important part of the solution is for journalists to commit to accuracy and completeness in scientific reporting and attribution, fairly including published corrections when they are brought to editors' attention – in *every* circumstance. Discover Magazine should embrace, not avoid, necessary corrections to its articles.

As we stated above, should the present situation remain unresolved in a fair way, we would be compelled to share with our wider scientific community Discover Magazine's editorial policy of unwillingness to correct unfair reporting. But we very much hope that you will reconsider, and update the two posted articles to correct for the omissions.

Sincerely,

Gerald A. Goldin

Distinguished Professor, Mathematics, Physics, Education,

Rutgers – The State University of New Jersey

Member of the Graduate Faculties of Mathematics, Physics & Astronomy, and Education Permanent Member, Center for Discrete Mathematics and Theoretical Computer Science Alexander von Humboldt Research Prize, Physics

University Director, Science and Mathematics Partnerships (1998-2014)

Principal Investigator, Co-Chair of Governing Board, NJ Statewide Systemic Initiative, Mathematics, Science, and Technology Education (1993-2008)

Principal Investigator, NSF Center for Mathematics in America's Cities (2005-10) https://gse.rutgers.edu/gerald_goldin

Tel. +1-908-720-2434

David H. Sharp Fellow, American Physical Society Fellow, Los Alamos National Laboratory Fellow, American Association for the Advancement of Science Fellow, Society for Industrial and Applied Mathematics U.S. Dept. of Energy Defense Program Award of Excellence Who's Who Lifetime Achievement Award Chief Scientist, Directorate for Science Teaching and Education, LANL (2006-07) Univ of California Council of Vice Chancellors for Research (2006-11) Board of Governors, Institute for Mathematics and its Applications (2007-11)