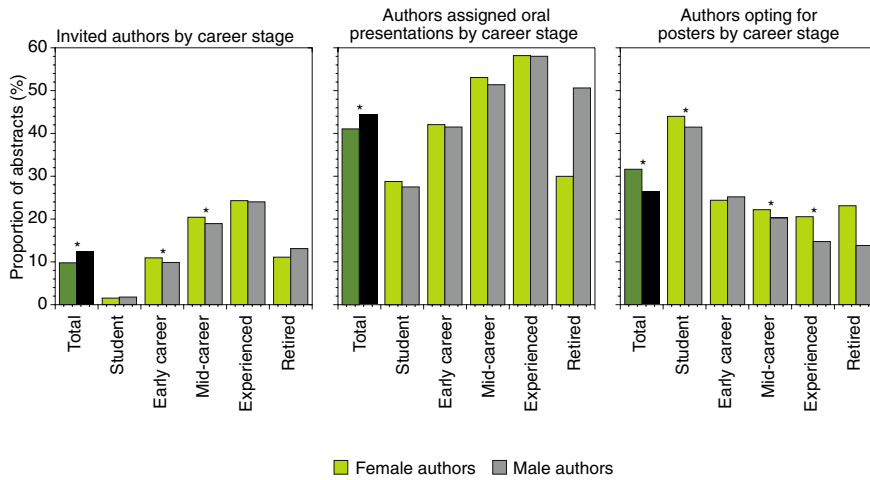


## EQUITY AND DIVERSITY

### Muted participation

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Credit: Macmillan Publishers Ltd.

The underrepresentation of women in physical sciences is an established fact. The reasons behind it are far too many to enumerate and so tightly interwoven that identifying one or a few dominating factors has been nearly impossible. Heather Ford and collaborators focused on one specific issue, showing that women scientists are systematically underrepresented as invited and contributing oral presenters in the annual Fall Meeting of the American Geophysical Union (AGU). The total submitted abstracts for the AGU Fall Meetings between 2014 and 2016 are more than 64,000. When submitting, the participants also volunteered self-identified gender classifications and career-stage information. Ford et al. used this unique database to understand the fractional representation of women speakers as a function of their career stage (pictured; asterisks indicate significant results at  $p < 0.05$ ). 32% of all submitted abstracts came from women, which is slightly higher than the percentage of female members of the AGU (28%) — but significantly lower than the 49.6% global population fraction of women.

Further inspection of the data reveals that women are significantly less frequently invited as speakers or assigned oral presentations than men (10% versus 12% and 41.1% versus 44.5%, respectively). At first glance, this disparity appears to be driven by the dearth of women in senior positions. However, careful analysis by Ford et al. showed that the apparent gender parity at earlier career stages was achieved by female session organizers inviting and assigning oral talks disproportionately more to women than male session organizers did. A final interesting result from this study was that women participants were significantly more likely than men to opt for a poster presentation at almost all career stages, potentially a reflection of the known effect of women underestimating their abilities and performance.

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