# Citation Auctions as a New Method for Boosting Science 

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The scientific community has been suffering from peer review for decades. This process (also called refereeing) subjects an author's scientific work or ideas to the scrutiny of one or more experts in the field. Publishers use it to select and screen manuscript submissions, and funding agencies use it to award research funds. The goal is to get authors to meet their discipline's standards and thus achieve scientific objectivity.

Publications and awards that haven't undergone peer review are often regarded with suspicion by scholars and professionals in many fields.

However, peer review, although universally used, has many drawbacks. We propose replacing peer review with an auction-based approach: the better the submitted paper, the more scientific currency the author will likely bid to have it published. If the bid correctly reflects the paper's quality, the author will be rewarded in this new scientific currency (a complementary currency); otherwise, the author will lose this currency.

We argue that citations are appropriate currencies for all scientists. We believe that citation auctions will encourage scientists to better control their submissions' quality. It will likely also inspire them to prepare more exciting talks for accepted papers and to invite discussion of their results at congresses and conferences and among their colleagues. In the long run, citation auctions could have the power to greatly improve scientific research. In the seminar a number of scientific issues regarding this approach will be discussed: auctions, agents, complementary currencies and related topics to the stream of publication of science, from a multidisciplinary perspective. Furthermore, we'll explore how citation recommenders may work within this paradigm, where scientists would need further marketing tools for increasing their "revenues" in terms of citations.

