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The growing popularity of bibliometric indexes goes hand in hand with their critique by those who claim that scientist's impact cannot be reduced to a single number. Some even believe that such a complex reality fails to submit to any quantitative description. We argue that neither of the two controversial extremes is true. With our new agent-based model (doi.org/10.1073/pnas.2001064117) we can describe the emergence of citation curves very accurately.

In the model we assumed that some citations are distributed according to the rich get richer rule while some others are allocated totally at random. This yields a very accurate model that is governed by merely three easily interpretable parameters: productivity, total impact, and rho, which measures preferential vs. random rules ratio..

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