## Choosing a Volunteer through the War of Attrition

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## Abstract

A group needs one of its members to take an initiative role for a project and the one who volunteers first is chosen. Though the project is valuable to all the members, taking an initiative role is costly. In such a situation, the members may wait to see whether some other member volunteers first: the war of attrition arises. Using a model in which each member is unable to volunteer with a positive probability but cannot prove it to the other members, we examine who is likely to come forward as the volunteer in a game-theoretic model and study when the selection occurs quickly.

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