EVOLUTIONARY GAME THEORY

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John Maynard Smith & George R Price

Smith, J. M., & Price, G. R. (1973). The Logic of Animal Conflict. Nature, 246(5427), 15–18. <u>https://doi.org/10.1038/246015a0</u>

Smith, J. M. (1982). *Evolution and the Theory of Games*. Cambridge University Press. <u>https://doi.org/10.1017/CBO9780511806292</u>

Strategy

Species level strategy set (Genotypic Variants) Individual Action depends on Genotype Evolutionary games

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<u>Player Interactions</u>

Individuals interact randomly and repeatedly Payoffs are in terms of evolutionary fitness Evolutionary games

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<u>Equilibrium</u>

Evolutionary Stable Strategy

A whole population with that strategy can't be invaded by a mutant strategy Evolutionary games









Lange, T. Z., Smolla, M., Waring, T.M. (In Preparation) **Detecting reciprocity in** empirical economic networks













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