

# Pairwise comparison dynamics for games with continuous strategy space

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This paper studies pairwise comparison dynamics for population games with continuous strategy space. We show that the pairwise comparison dynamic is well-defined if certain mild Lipschitz continuity conditions are satisfied. We establish Nash stationarity (NS) and positive correlation (PC) for pairwise comparison dynamics. Finally, we prove global convergence under general deterministic evolutionary dynamics in potential games, and global asymptotic stability under pairwise comparison dynamics in contractive games.

*I thank Professor William H. Sandholm for very helpful comments.*

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