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Collective quantum games with Werner-like states

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Highlights

- The implementation of the imitation of the best evolving rule proves to be a very useful tool to analyze the collective behaviour of two-person games via simulation.
- Werner-like states enable to scrutinize the way in which the features of the studied games vary from the quantum entangled scenario up to that of independent players with uniform random strategies
- In the Prisoner's Dilemma, Hawk and Dove, Samaritan's Dilemma game-types, the new Nash equilibriums achieved with highly correlated games maximize the sum of the payoffs of both players, i.e., they provide its (unique) so called social welfare solution. The Battle of the Sexes game-type turns out much more challenging at this respect, because it has two social welfare solutions.

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