

# Compromises and Rewards: stable and non-manipulable probabilistic matching \*

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Can we reconcile stability with non-manipulability in two-sided matching problems by selecting lotteries over matchings? We parameterize, through sets of utility functions, how ordinal preferences induce preferences over lotteries and develop corresponding notions of ex-ante stability and non-manipulability. For most sets, the properties are incompatible. However, for the set of utility functions with increasing differences, stability and non-manipulability characterize Compromises and Rewards. This novel rule is fundamentally different from the one that has attracted most attention in the literature, Deferred Acceptance. We then derive complementary negative results that show that increasing differences essentially is a necessary condition for the properties to be compatible.

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\*<https://link.springer.com/article/10.1007>

†<https://sites.google.com/view/jgu>