

# Matching with myopic and farsighted players <sup>\*</sup>

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We study stable sets for marriage problems under the assumption that players can be both myopic and farsighted. We introduce the new notion of the myopic-farsighted stable set, which is based on the notion of a myopic-farsighted improving path. A myopic-farsighted stable set is the set of matchings such that there is no myopic-farsighted improving path from any matching in the set to another matching in the set (internal stability) and there is a myopic-farsighted improving path from any matching outside the set to some matching in the set (external stability). For the special cases where all players are myopic and where all players are farsighted, our concept predicts the set of matchings in the core. When all men are myopic and the top choice of each man is a farsighted woman, we show that the singleton consisting of the woman-optimal stable matching is a myopic-farsighted stable set. The same result holds when all women are farsighted. We present examples where this is the unique myopic-farsighted stable set as well as examples of myopic-farsighted stable sets consisting of a core element different from the woman-optimal matching or even of a non-core element.

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<sup>\*</sup><https://cris.maastrichtuniversity.nl/portal/files/12333728/RM17011.pdf>

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