THE FINAL FATES OF MASSIVE, UNSTABLE TRIPLES

- Context Massive stars often reside in hierarchical triples, and these can disintegrate due evolutionary processes.

- Goal Provide a statistical overview of the outcomes of destabilized, massive triples.

- Methods Evolve a population of triples using orbit-averaged evolution + population synthesis.

  - Systems that destabilize are transferred to an n-body code.

- Results

  - Collisions between two stellar objects ($35 - 40$ %).

    - Collisions occur mainly between two main sequence stars.

  - Ejection of one of the bodies ($32 - 40$%).

    - Ejected stars have velocities of a few km/s, with some exceeding 10^2 km/s.

STABLE TRIPLE

DESTABILIZATION

COLLISION

EJECTION

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