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Long-term Stability Of Earth-like Planets NIYOUSHA DAVACHI, Univ of Texas, Arlington, MARIALIS ROSARITO FRANCO COLLABORATION — Different regions of phase space where Earth-like planets can persist for long time near a binary system is the target of our studies. Study of different mass ratios and eccentricities in different scenarios yields to more specific regions where Earth-like planets are stable. By using multiple body integrators and taking planets to be test particles in different initial conditions we obtain minimum and maximum orbits in which the planet is stable. This helps us determine in what regions expect seeing stable Earth-like planets.

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