

# Periodic Orbits and Mission Design Calculations

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Using pseudoarclength continuation in updated parallel versions of the AUTO software, periodic orbits in the CR3PB (Circular Restricted 3-Body Problem) have been determined about all five libration points. It is found that all such families are connected via bifurcations. Thus fuel efficient paths to very distant planetary bodies can be designed. In addition homotopies of the new figure eight three body solutions to the CR3BP have been found.

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