

# Poincare's Stability Conditions for Orbital Stability of Almost Periodic Solutions

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For autonomous ordinary differential systems in any finite dimension, conditions for the orbital asymptotic stability of almost periodic solutions are derived. The conditions generalize the classical Poincare's stability condition for orbital stability of periodic orbits of planar systems, as well as earlier stability conditions of Li and Muldowney for periodic orbits and quasi-periodic orbits in higher dimensions. The talk is based on the Ph.D. thesis of Dr. Xi-gang Li at the Northeast Normal University (China), co-supervised by Professors Qichang Huang and Ke Wang, and the speaker.