Kilohertz QPOs as modes of an accretion disk

M. Ali Alpar (1) and Dimitrios Psaltis (2)

(1) Sabanci University, Istanbul, Turkey, (2) University of Arizona, Tucson, Arizona, USA

Kilohertz QPOs are likely to reflect the modes of the inner boundary or transition region of an accretion disk. Making allowance for the non-Keplerean radial dependence of the azimuthal frequency Ω in the boundary/transition region, the highest frequency QPO band turns out to correspond to radial-epicyclic oscillation frequencies, rather than to the azimuthal/Keplerean frequencies as previously assumed. This effects the constraints obtained on neutron star mass-radius relations. Recent developments are discussed.