Abstract Submitted for the SES09 Meeting of The American Physical Society

Moment of Inertia as a Sensitive Probe of the Equation of State FARRUKH FATTOYEV, JORGE PIEKAREWICZ, Florida State University — Several relativistic mean-field models will be employed to compute the equation of state of neutron-rich matter in β -equilibrium. Using this set of the equations the mass, radii, moments of inertia, *etc.*, of an axisymmetric slowly rotating neutron stars in hydrostatic equilibrium will be computed. In particular, it will be shown which of these observables are sensitive to the choice of the equation of state.

> Farrukh Fattoyev Florida State University

Date submitted: 14 Aug 2009

Electronic form version 1.4