

THE EQUATION OF STATE OF SYMMETRIC AND ASYMMETRIC NUCLEAR MATTER

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The equation of state (EOS) of nuclear matter is a very important ingredient in the study of nuclear properties, heavy ion collisions, neutron stars and supernova. Accurate assessment of the value of the incompressibility coefficient, K , of symmetric nuclear matter, which is directly related to the curvature of the EOS, is needed to extend our knowledge of the EOS in the vicinity of the saturation point. We review the current status of K as determined from experimental data on isoscalar giant monopole and dipole resonances (compression modes) in nuclei within the microscopic theory of mean-field-based random phase approximation.