STUDYING THE LANDAU MASS PARAMETER OF THE EXTENDED SIGMA MODEL FOR NEUTRON STAR MATTER

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We present a Bayesian analysis of the Landau mass within the extended $\sigma-\omega$ model for neutron star matter. To this purpose, we consider the mass measurement of the object PSR 0740+6620, the tidal deformability estimation from GW170817 and the mass-radius estimate of PSR J0030+0451 by NICER. Using the Landau mass as free parameter of the theory, we tested the predictive power to find the best value for this nuclear parameter of the Bayesian method.

PACS: 26.60.-c; 04.30.-w; 21.30.Fe; 21.60.Jz; 21.65.-f

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