— 第972回九大原子核セミナー —

講師： Cheng-Jun Xia 氏 (Zhejiang University, Ningbo Institute of Technology)

演題： Nuclear “pasta” structures and symmetry energy

日時： 11 月 26 日 (木) 16:00〜

場所： (※ オンラインセミナー)

概 要

In the framework of the relativistic mean field model with Thomas-Fermi approximation, we study the structures of low density nuclear matter in a fully three-dimensional geometry. Typical pasta structures (droplet, rod, slab, tube, and bubble) arranged in various crystalline configurations are obtained for both fixed proton fraction and cold catalyzed matter. By introducing an ω-ρ cross coupling term, we further examine the pasta structures with smaller symmetry energy slope L = 41.34 MeV, which is consistent with various constrains from nuclear physics and pulsar observations.

連絡先: 九州大学 理学部 物理学教室 理論核物理研究室
TEL: 092-802-4101 (内線 8072)
金　龍熙 (kimu.ryonhi@phys.kyushu-u.ac.jp)

2020 年 10 月 26 日