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Effect of strong magnetic fields on the nuclear "pasta" phase structure

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The effect of strong magnetic fields on the properties of the pasta structure is calculated within a Thomas-Fermi
approach using relativistic mean-field models to modulate stellar matter. It is shown how quantities such as the
size of the clusters and Wigner-Seitz cells, the surface tension, and the transition between configurations are affected. It is expected that these effects may give rise to large stresses in the pasta phase if the local magnetic field suffers fluctuations.

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