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Equation of State of the Nuclear Pasta JUTRI TARUNA, JORGE PIEKAREWICZ, Florida State University — Pasta phase – the neutron-rich matter at subnuclear densities present in the core-collapse supernovae and the crust of neutron stars – displays fascinating complex structures. The equation of state and the two-body spin-isospin dependent correlation function in the nuclear pasta are computed via semi-classical Monte Carlo simulation that incorporates a "semi classical" short-range spin-dependent term to simulate Pauli correlations.

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