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High-Energy Phase Diagrams with Charge and Isospin Axes under Heavy-Ion Collision and Stellar Conditions[1] KRISHNA ARYAL, VERONICA DEXHEIMER, Kent State Univ - Kent — We investigate the phase transition from hadron to quark matter in the general case without the assumption of chemical equilibrium with respect to weak decays. The effects of net strangeness on charge and isospin fractions, chemical potentials, and temperature are studied in the context of the Chiral Mean Field (CMF) model that incorporates chiral symmetry restoration and deconfinement. The extent to which these quantities are probed during deconfinement conditions expected to exist in protoneutron stars, binary neutron-star mergers, and heavy-ion collisions is analyzed quantitatively via the construction of 3-dimensional phase diagrams.

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