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Searching for isospin drift sites in heavy dissipative nuclear systems

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Heavy nuclear systems formed in dissipative collisions at Fermi energy develop a variety of possible sites where density gradients and instabilities combine in different possible ways.

Depending on physical conditions, these sites may host different distinct isospin processes, either related to isospin transport or to phase transitions.

As we will show on the basis of a suited set of microscopic simulations, these processes result in different types of fragment emissions, in terms of chronology, size and density conditions.

Still, they may appear simultaneously in the same nucleus-nucleus collision event and, more generally, they may mix up when initial conditions are similar.

Supposedly, if more attention could be paid to the competition of different isospin processes occurring in similar physical conditions, even more reliable isospin observables could be extracted from the experiments.

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