

Particle and fragment emitting sources and densities in heavy-ion collisions

G. Verde

*Physics and Astronomy Department, University of Catania
and INFN, Section of Catania*

Imaging techniques are used to extract the space-time profiles of sources emitting particles and fragments in heavy-ion collisions. While the technique is well established in the study on two-proton intensity interferometry, the extension to heavier particles requires special considerations in order to correct for distortions by collective motion. The developed ideas are used to extract densities in Sn+Sn and Xe+Au collisions at $E/A=50$ MeV. Perspectives for future applications of the techniques in high resolution experiments to explore the density dependence of the symmetry energy will also be discussed.