

# Deblurring of Nuclear Collisions

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Central nuclear collisions compress nuclear matter, producing the highest pressures in the Universe, comparable to those reached in neutron-star mergers before black-hole formation. According to simulations, these pressures can give rise to intricate emission patterns tied to the reaction plane of the collisions. Unfortunately, that plane can at best be coarsely estimated in individual collision events, so only blurred emission patterns relative to the reaction plane can be recorded, limiting any inference of pressure. Working with ensembles of collision events, we infer the level of blurring due to poor reaction-plane resolution and apply optical deblurring techniques to recover fine details of particle emission in nuclear collisions.

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