

Abstract Submitted
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Pionic interferometry in RHI Collisions GERALD A. MILLER,
JOHN G. CRAMER, Physics Department, University of Washington — We explain and apply our chiral treatment of pionic interactions with the medium, nucl-th/0411031. The previous analysis of STAR data which found evidence for the presence of a chiral phase transition is extended to include the data of NA49, taken at lower energy. Our preliminary results are that all of the data for radii and pionic spectra can be explained using the same approach, and that the medium's influence is characterized as a strong attraction combined with a moderate amount of absorption. The inferred size of the system grows as the energy is increased. We also analyze the complete correlation function to determine if measurements of other observables could further test our theory.

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