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Comparison of Transverse Coherence Properties in Seeded and Unseeded FEL

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The transverse coherence of the source is an important property for FEL experiments. Theory and simulations indicated different features for seeded and unseeded FELs but so far no direct comparison has been pursued experimentally on the same facility.

At FERMI one has the unique possibility to test both configurations (SASE and seeding) within the same operating conditions.

In this contribution we present the experimental results of the characterization of transverse coherence with special attention to the evolution of such property.

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Yes

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