

# **Atom-atom correlations in dissociation of a spatially inhomogeneous molecular condensate.**

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abstract: I will report from a recent study on atom-atom correlations in the dissociation of a Bose-Einstein condensate of molecular dimers (MBEC) made of either bosonic or fermionic pairs. We have derived analytical short time asymptotes for the back-to-back and collinear Glauber's correlation functions, the latter being a matter wave analog to the Hanbury-Brown and Twiss effect for photons. We compare our formulae to numerical calculations.