Abstract: In kinetic theory or in other fields, some control of the gradient by the symmetric gradient of the macroscopic velocity of a system of particle may be necessary, since only the second quantity appears naturally in physical equations. This type of inequality is known on bounded domains with or without axisymmetries. In this talk, we present a version on the whole space equipped with a probability measure, and give an example where this type of tool may be useful. This is a joint work with K. Carrapatoso, J. Dolbeault, S. Mischler, C. Mouhot, and C. Schmeiser.