

Universalität fern des Gleichgewichts /

Universality far from Equilibrium

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Topical phenomena in high-energy physics related to early universe cosmology ("Big Bang") and to collision experiments of heavy nuclei ("Little Bang") involve far-from-equilibrium dynamics described by quantum field theory. Most remarkably, important aspects of this dynamics turn out to be universal, i.e. they become independent of the details of the underlying microscopic theory and energy scale. This opens the spectacular possibility of measuring these properties even in compact table-top experiments with ultracold quantum gases.