

# Quark non-equilibrium molecular dynamics and particle production from SPS to RHIC energies

Stefan Scherer<sup>a</sup> Marcus Bleicher<sup>a</sup> Markus Hofmann<sup>a</sup>  
Ludwig Neise<sup>a</sup> Horst Stoecker<sup>a</sup> Walter Greiner<sup>a</sup>

<sup>a</sup>*Institut fuer Theoretische Physik, J.W.Goethe Universitaet, D-60054 Frankfurt  
am Main, Germany*

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*Presented by: Stefan Scherer*

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## **Abstract**

The quark-molecular-dynamics model describes quarks as classical point particles carrying a color charge and interacting via a linear increasing, confining potential. The time evolution of such a system of quarks yields colorless clusters which can be identified as hadrons. The model is applied to study the dynamics of relativistic heavy ion collisions from CERN-SPS to RHIC energies. The non-equilibrium dynamics of hadronization and the loss of correlation among quarks is studied as a function of the collision energy.

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