

Direct Photons from microscopic+macroscopic hybrid model

The microscopic transport model UrQMD and a micro+macro hybrid model are used to calculate direct photon spectra from A+A-collisions at FAIR- and RHIC-energies. In the hybrid model, the intermediate high-density part of the nuclear interaction is described with ideal 3+1-dimensional hydrodynamics, while the initial state and final state-scatterings are modelled in UrQMD. Different Equations of State of the matter created in the heavy-ion collisions are investigated and the resulting spectra of direct photons are shown. The emission patterns of direct photons in space and time are discussed.

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Track Classification: Electromagnetic probes