



expected to improve a lot in BES II

what do all these means for the phase structure of QCD ?

need comprehensive dynamical modeling for lower beam energies leading to quantitative predictions

e/e (3+1)D viscous hydrodynamics



conserved current/diffusion/fluctuation



magnetic field and anomaly



quantitative predictions and comparisons with expt.

- ⇒ initial conditions: with baryon densities, baryon stopping/transport, topological fluctuations, B-field
- ⇒ pre-hydro stage
- ⇒ decay of magnetic field: LQCD electrical conductivity
- ⇒ LQCD EoS, baryon fluctuations & diffusion constant
- ⇒ modeling/phenomenology of QCD critical point, EoS at large densities
- ⇒ real time evolution of fluctuations
- ⇒ freeze-out and hadronic stage at large baryon densities
- ⇒ comparison with expt., infer QGP properties & QCD phase structure
- ⇒ ■ ■ ■ ■ ■ ■ ■ ■