

## Strangeness in Quark Matter 2019



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# Equation of state of QCD matter within the Hagedorn bag-like model

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The QCD equation of state at zero and finite baryon densities is considered in the framework of a Hagedorn bag-like model with a crossover transition from hadronic matter to quark-gluon plasma. The model, augmented with non-zero masses of quarks and gluons in the bag spectrum, provides a fair quantitative description of lattice data on thermodynamic functions, the (higher-order) fluctuations and correlations of conserved charges, as well as the Fourier coefficients of net-baryon density at imaginary chemical potential. Signatures of a possible first-order phase transition at finite baryon densities are discussed within this framework as well.

## Collaboration name

## Track

QCD phase diagram and critical point

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