Workshop for young scientists with research interests focused on physics at FAIR



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## Propagators and phase structure of Nf=2 and Nf=2+1 QCD

Thursday, 6 September 2012 10:00 (30 minutes)

We investigate the phase structure of QCD at finite temperature and chemical potential by solving a coupled set of truncated Dyson-Schwinger equations for the quark and gluon propagator. We take into account the full back-reaction of the quarks onto the Yang-Mills sector and we include the effects of strange quarks. We discuss the resulting thermal mass of the unquenched gluon propagator and extract order parameters for the chiral and deconfinement transition from the quarks.

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Session Classification: Talks