

# Tetraquarks and the phase diagram of QCD

*Wednesday 8 February 2017 08:50 (20 minutes)*

We discuss the role of tetraquarks in the phase transitions of QCD. For three very light flavors, tetraquarks may generate a second chiral phase transition. In the plane of temperature and chemical potential ( $T$  and  $\mu$ ), tetraquarks must be included in order to use effective models to determine the position of the critical endpoint. The tetraquark condensate is the (color invariant) square of the condensate for color superconductivity. Hence it is natural that in the plane of  $T$  and  $\mu$ , a crossover line for tetraquarks connects smoothly to the transition line for color superconductivity.

## Preferred Track

New Theoretical Developments

## Collaboration

Not applicable

**Author:** PISARSKI, Robert (BNL)

**Presenter:** PISARSKI, Robert (BNL)

**Session Classification:** Parallel Session 5.3: New Theoretical Developments (I)

**Track Classification:** New Theoretical Developments