



Contribution ID: 21

Type: **not specified**

## Hadron-Quark Transition in High Density Nuclear Matter

*Monday 18 September 2017 11:20 (40 minutes)*

The talk will focus on the dynamics of nucleon-nucleon repulsive core and the mechanisms of quark-hadron transition in high density nuclear matter. The strength of the nuclear repulsion plays an important role in the equation of state of the nuclear matter and its mechanism is largely unknown. There are several issues such as hidden-color degrees of freedom, superfast quarks as well as inelastic excitations in nucleon-nucleon systems that currently considered as possible mechanisms in generating nuclear repulsion. These mechanisms will be discussed in detail considering their implication in the dynamics of the superdense nuclear matter. Also the brief overview will be given on the possibilities of experimental verification of the nuclear core dynamics in fixed target and collider experiments.

### Type of contribution

Talk

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