

Speaker: **Martin Clevel**

Title: **Properties of  $J/\psi$  in light quark matter**

Abstract:

With various experiments studying heavy-ion collisions a demand exists in the hadron physics community for theoretical predictions of hadronic properties at temperatures and densities far from equilibrium. In this work we will study the implications of light quark matter at finite temperatures on the  $J/\psi$  vector meson. We will apply a chiral unitary approach to account for coupled channels, most importantly channels with open charm. The in-medium solution accounts for the change in self-energy that the  $J/\psi$  acquires from interacting with the surrounding light quark matter, most notably pions and rho mesons. Ultimately, the solutions to the corresponding Lippmann-Schwinger Equations will be used to calculate observables such as the spectral function of the  $J/\psi$ .