FAKULTÄT für PHYSIK LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT TECHNISCHE UNIVERSITÄT MÜNCHEN MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 06.06.2013, 16¹⁵ Uhr

Hörsaal der LMU in Garching, Am Coulombwall 1 Treffen zum gemeinsamen Kaffee 16 Uhr

Dr. Miguel Escobedo

(Physik Department T30f / TUM)

Heavy quarkonium moving through a quark gluon plasma

The dissociation of heavy quarkonium seen in heavy-ion collisions is a phenomenon that allows to extract information about the produced thermal medium. In recent years a program to study heavy quarkonium with the use of non-relativistic effective field theories has been started. It allows to make the computations in a more systematic way by defining a more suitable power counting and makes it more difficult to miss necessary resummations. However, most of the studies using effective field theories have assumed perfect thermal equilibrium and a bound state comoving with the medium, which is far from the experimentally realized situation. In this talk, I will review the results of effective field theories for heavy quarkonium in a thermal medium and I will discuss how these results are affected when the bound state has a finite momentum with respect to the thermal medium.

gez. Peter Thirolf Tel. 289-14064 gez. Norbert Kaiser Tel. 289-12367