DNP08-2008-000060

Abstract for an Invited Paper for the DNP08 Meeting of the American Physical Society

Hadrons in Medium¹ ULRICH MOSEL, Universitaet Giessen

That hadrons can change their properties, i.e. spectral functions and interactions, when they are embedded in the nuclear environment should come as no surprise since they interact with their surroundings. The interest in this phenomenon has been reawakened about 2 decades ago when possible connections of these in-medium changes with properties of QCD were pointed out. In particular, interest focussed on chiral symmetry restoration, expected to take place in the nuclear medium. In this talk I will assess the theoretical basis for these expectations and then discuss our present calculations of in-medium properties of vector mesons. I will then confront these expectations with experiments performed on cold matter where the interpretation of observables should be cleanest.

¹Work supported by BMFT.