Experimental approaches for studying in-medium properties of mesons

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Measurements of hadron properties and their modification in strongly interacting matter provide a link between experimental observables and Quantum Chromodynamics (QCD) in the non-perturbative regime. Different experimental approaches and their specific sensitivity to medium modifications will be discussed. Recent results for light vector mesons obtained in photon and proton induced reactions will be presented. Experimental data on the transparency ratio, the line shape, the momentum distribution, the excitation function and the search for meson nucleus bound states are compared to theoretical predictions. The relevance of transport calculations for this comparison is emphasized. An extension of these measurements to pseudoscalar mesons will be discussed.

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