Organisé conjointement par
CPHT-École Polytechnique et Groupe Théorie IPN Orsay

SÉMINAIRE de PHYSIQUE des PARTICULES

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Quarkonium suppression in heavy-ion collisions: an open quantum system approach

Résumé :
We address the evolution of heavy-quarkonium states in an expanding quark-gluon plasma by implementing effective field theory techniques in the framework of open quantum systems. The quarkonium density-matrix evolution equations can be written in the Lindblad form. Thermal mass shifts, thermal widths and the Lindblad equation itself depend on only two non-perturbative parameters: the heavy-quark momentum diffusion coefficient and its dispersive counterpart. Finally, by numerically solving the Lindblad equation, we provide results for the Υ(1S) and Υ(2S) nuclear modification factors.

Lundi 30 Octobre 2017

11:00

Salle A015