

SEMPARIS – Séminaires en région parisienne

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Séminaire commun LPTENS/LPTHE

Mardi 18 Juin 2019, 11 :30

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Domaines : hep-th

Titre : *The connection between quasinormal modes and heat kernels*

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Résumé : *We develop a framework that relates two different methods of calculating one-loop functional determinants of kinetic operators : 1) the quasinormal mode method of Denef, Hartnoll and Sachdev and 2) the heat kernel method of Giombi, Maloney and Yin. The objects that connect them are the Selberg zeta function and the Selberg trace formula. We show that this framework can be used to predict quasinormal modes for certain spacetimes if the Selberg zeta function for the spacetime is known. We discuss how this is related to the classic question "Can one hear the shape of a drum?"*
