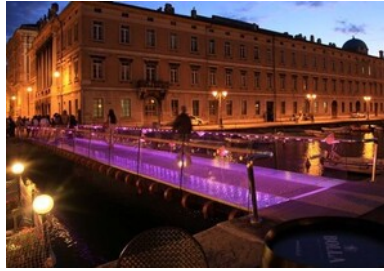


Meeting PRIN "String Theory as a bridge between Gauge Theories and Quantum Gravity"



Contribution ID: 17

Type: **not specified**

Analytic computation of black hole quasinormal modes

Thursday, February 22, 2024 4:00 PM (15 minutes)

In this talk, we describe two methods that provide the quantization condition for the quasinormal mode frequencies in Schwarzschild (anti-)de Sitter black holes in four dimensions. The first consists of using the Nekrasov-Shatashvili functions, or, equivalently, the classical Virasoro conformal blocks, to obtain the connection coefficients for the differential equation encoding the spectral problem. The second method is based on a perturbative expansion of the local solutions of the differential equation, that involves multiple polylogarithmic functions. We conclude by stating our main results and discussing how these methods can be generalized to problems in different backgrounds.

Presenter: ARNAUDO, Paolo (SISSA)

Session Classification: Gong Show 1