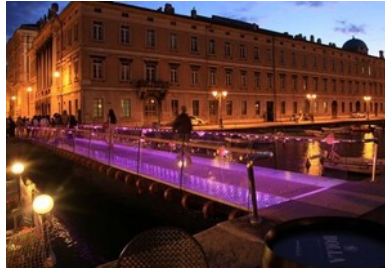


Meeting PRIN "String Theory as a bridge between Gauge Theories and Quantum Gravity"



Contribution ID: 21

Type: **not specified**

Rotating metrics from scattering amplitudes in arbitrary dimensions.

Friday, 23 February 2024 11:15 (15 minutes)

Within the framework of recovering general relativity from scattering amplitudes, it is possible to compute the metric induced by the most generic rotating spherically-symmetric matter configuration at quadrupole order by considering stationary massive spin-1 particles emitting gravitons. This approach leads to a natural definition of a multipole expansion in any dimension and the observation of a new quadrupole moment in the space-part of the metric, allowing us to investigate the black hole-particle correspondence in dimensions greater than four.

Presenter: GAMBINO, Claudio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Gong Show 2