

Global quantum effects on gravitational radiation in the era of the LISA mission

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The Loop Quantum Gravity group at IEM-CSIC studies global quantum effects that may influence the emission of gravitational radiation during the final stages of supermassive black hole coalescence. We use Hamiltonian formalisms that allow us to relate black holes with cosmological backgrounds and establish a correspondence between the quantum field theories for gauge invariants in both cases. We aim to extract predictions with consequences for the fundamental physics of the LISA interferometer.

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