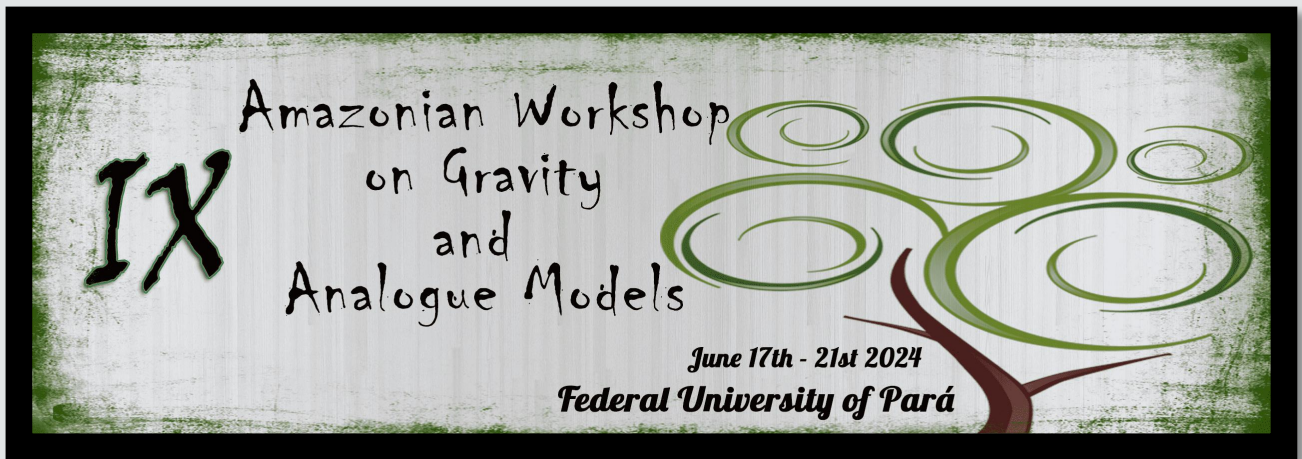




TIME-EVOLUTION OF PERTURBATIONS IN QUASI-SCHWARZSCHILD BLACK HOLES

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Both experimental and theoretical considerations suggest that general relativity may require modifications at some level. General relativity passes all the tests from the Solar system to gravitational wave observations. However, there seems to be a need for small modifications to achieve a complete theory when it comes to the strong field. In this oral communication, we discuss an expansion in the power-law of the effective potential describing perturbations around the Schwarzschild black hole. From this modification, we study the time-evolution of scalar, vector, and gravitational fields, showing how terms possibly coming from modified theories of gravity affects the evolution of signals.