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An overview of quasinormal modes in modified and extended gravity

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As gravitational waves are now being nearly routinely measured with interferometers, the question of using them to probe new physics becomes increasingly legitimate. In this article, we rely on a well established framework to investigate how the complex frequencies of quasinormal modes are affected by different models. The tendencies are explicitly shown for both the pulsation and the damping rate. The goal is, at this stage, purely qualitative. This opportunity is also taken to derive the Regge-Wheeler equation for general static and spherically symmetric metrics.

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