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## Regular charged black holes, energy conditions and quasinormal modes

*Wednesday, 13 September 2023 17:00 (20 minutes)*

We discuss energy conditions and quasinormal modes for scalar perturbations of regular charged black holes within the framework of General Relativity coupled to non-linear electrodynamics. The frequencies are computed numerically adopting the WKB method, while in the eikonal limit an analytic expression for the spectra is obtained. The impact of the electric charge, the angular degree, and the overtone number on the spectra is investigated in detail. We find that all frequencies are characterized by a negative imaginary part, and that each type of energy conditions imply a different quasinormal spectrum.

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