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Black hole perturbations in the large D limit

The problem of describing the different types of geometrical perturbations of classical black holes in General Relativity can be drastically simplified into a brief set of equations with analytical solutions using the large D limit.
This approximation assumes that the number of space dimensions is large enough that, as D»1, objects with subleading dependences on the number of dimensions can be treated perturbatively.
Still, the phenomena that this framework predicts is, often, largely equivalent to that of objects in smaller dimensional universes such as ours (D=4) or the usual bulk in standard AdS/CFT (D=5), thus becoming a useful shortcut to otherwise unsolvable problems.

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