

Eigenvalues control for a Finsler--Laplace operator

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Using the definition of a Finsler--Laplacian given by the first author, we show that two bi-Lipschitz Finsler metrics have a controlled spectrum. We deduce from that several generalizations of Riemannian results. In particular, we show that the spectrum on Finsler surfaces is controlled above by a constant depending on the topology of the surface and on the quasireversibility constant of the metric. In contrast to Riemannian geometry, we then give examples of highly non-reversible metrics on surfaces with arbitrarily large first eigenvalue.

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