

## Two balls maximize the third Neumann eigenvalue in hyperbolic space

PEDRO FREITAS AND RICHARD SNYDER LAUGESEN

**Abstract.** We show that the third eigenvalue of the Neumann Laplacian in hyperbolic space is maximal for the disjoint union of two geodesic balls, among domains of given volume. This extends a recent result by Bucur and Henrot in Euclidean space, while providing a new proof of a key step in their argument.

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