HOT SPOTS CONJECTURE FOR POLYGONAL DOMAINS

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The hot spots conjecture says that a second Neumann eigenfunction of a domain in a Euclidean space can not attain its global extrema in the interior of the domain. I shall try to provide a brief survey of the known results on this topic. In particular, I will try to explain a recent result of myself with Chris Judge that provides an affirmative answer to the conjecture for triangular domains in the plane.