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Richard S Laugesen* (laugesen@illinois.edu) and **Bartłomiej A Siudeja**. *Sharp Estimates on the Magnetic Spectrum for Starlike Domains.*

We investigate sharp upper bounds on spectral functionals of the magnetic Laplacian (for a particle without spin), on convex and starlike plane domains. Our results cover the first eigenvalue, spectral zeta function, partition function, and more. The geometric normalization involves moment of inertia, area, and a natural $\log-L^2$ measure of the roughness of the boundary. (Received August 13, 2013)