

SEMICLASSICAL SPECTRAL BOUNDS WITH REMAINDER TERMS

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The Berezin and the Li-Yau inequalities state that the first term in Weyl's asymptotic formula serves also as uniform spectral bound on partial eigenvalue sums of the Dirichlet Laplacian. I will report on various attempts to improve these bounds by taking terms of lower order into account. Moreover, I will sketch some recent results on the magnetic Laplacian and on the Heisenberg Laplacian, respectively.

REFERENCES

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