THE WEYL ASYMPTOTICS OF ELLIPTIC OPERATORS ON A CLASS OF NONCOMPACT MANIFOLDS

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ABSTRACT. We illustrate the asymptotic behaviour of the eigenvalue counting function for self-adjoint, positive, elliptic linear operators, defined through classical weighted symbols of order $(1, 1)$, on an asymptotically Euclidean manifold X. We first prove a two term Weyl formula, improving previously known remainder estimates. Subsequently, we show that, under a geometric assumption on the Hamiltonian flow at infinity, there is a refined Weyl asymptotics with three terms. This is joint work with Moritz Doll.