1051-58-59

Juan B. Gil, Penn State Altoona, Mathematics and Statistics, 3000 Ivyside Park, Altoona, PA 16601, Thomas Krainer* (krainer@psu.edu), Penn State Altoona, Mathematics and Statistics, 3000 Ivyside Park, Altoona, PA 16601, and Gerardo A. Mendoza, Temple University, Department of Mathematics, Philadelphia, PA 19122. Trace expansions for elliptic cone operators.

We give a full asymptotic expansion of the trace of the resolvent of an elliptic cone differential operator as the spectral parameter tends to infinity. The hypotheses involve only minimal conditions on the symbols of the operator. In particular, our results are applicable to generic closed extensions of not necessarily symmetric elliptic operators on compact manifolds with conical singularities. (Received August 10, 2009)