
ALEXEY KOKOTOV, Concordia

Krein formula and S-matrix for Euclidean Surfaces with Conical Singularities

We use the Krein formula and the S-matrix formalism to give formulas for the zeta-regularized determinant of non-Friedrichs extensions of the Laplacian on Euclidean surfaces with conical singularities. This formula involves $S(0)$ and we show that the latter can be expressed using the Bergman projective connection on the underlying Riemann surface. The talk is based on the joint work with Luc Hillairet (Nantes).