
NADYA ASKARIPOUR, Inst. Henri Poincaré
Poincaré series map on open Riemann surfaces

Poincaré series is a classic technique to construct automorphic forms. Let R to be a Riemann surface and $k > 1$ is an integer. Poincaré series produces a linear and bounded operator from $A^{(1)}(\Delta)$ (which is the space of holomorphic and integrable k -differentials on the unit disc) onto $A^{(1)}(R)$ (which is the space of holomorphic and integrable k -differentials on R). I will talk about some applications of Poincaré series on Riemann surfaces. Also I will talk about the kernel of Poincaré series map, specially I will talk about some results in this direction, obtained with T. Barron.