MALIK YOUNSI, Université Laval

Computation of Analytic Capacity and applications to the Subadditivity Problem

We shall present a least-squares method for computing the analytic capacity of compact plane sets with piecewise-analytic boundary. The method furnishes rigorous upper and lower bounds which converge to the true value of the capacity. Several illustrative examples will be presented. We shall also discuss a conjecture which, if true, would imply that analytic capacity is subadditive. This is joint work with T. Ransford.