Computation of Analytic Capacity and Applications to the Subadditivity Problem (based on paper by M. Younsi & T. Ransford)

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I am going to discuss some theorems on computation of Analytic Capacity in case of compact plane sets with analytic and piecewise-analytic boundary, which lead to numerical algorithm which allow us to find Analytic Capacity in some certain cases. Some examples are going to be presented. Finally I formulate The Subadditivity Conjuncture for Analytic Capacity, show some equivalent statements to the conjuncture and prove the conjuncture in a special case.