Conformal radius $R(D, z)$ is an important characteristic of a planar domain $D$ at its point $z$. It controls scaling under conformal mapping, accuracy of polynomial approximation in the complex plane, and is related to energy and capacity of two-dimensional distributions of charges.

There are numerous publications concerning bounds and estimates for the maximal value of the conformal radius when $z$ is varying within $D$. This study is an attempt to find similar bounds and estimates for the expected value $E(R(D, z))$ of $R(D, z)$ when the reference point $z$ is uniformly distributed over $D$. In particular, we will discuss a transformation rule of the expected value under conformal mappings and present examples of evaluation of the expected values for some standard geometrical configurations. This is a joint work with A. Yu. Solynin. (Received February 10, 2014)