Grunsky Operator Connecting Christoffel Functions to Faber Polynomials

 $Nikos\ Stylianopoulos$

We review the Grunsky operator defined by quasiconformal domains in the complex plane and show how it can be used in order obtain new results connecting the associated Christoffel functions to Faber polynomials. In addition, we provide new estimates for the Grunsky coefficients, for domains bounded by piecewise analytic curves.