The map asymptotics constant t_g.

Edward A. Bender, Zhicheng Gao, L.B. Richmond

July 9, 2008

Abstract

The constant t_g appears in the asymptotic formulas for a variety of rooted maps on the orientable surface of genus g. Heretofore, studying this constant has been difficult. A new recursion derived by Goulden and Jackson for rooted cubic maps provides a much simpler recursion for t_g that leads to estimates for its asymptotics.