

1067-47-1170

Cyrus P. Aryana* (aryana@svsu.edu), Department of Mathematical Sciences, Saginaw Valley State University, University Center, MI 48710. *A direct calculation of the vector Riemann constants corresponding to the marked doubles.*

When a multiply connected planar region D is the conjugate symmetric region obtained from the unit disc by removing $g \geq 1$ disjoint closed discs D_1, \dots, D_g centered on the real axis then the double X of such a region has the extra anticonformal involution map $Q : X \rightarrow X$ of reflection in the real axis. A direct calculation for the vector Riemann constants Δ_0 for such double X is given.

The calculation is made through marking X by a symmetric canonical homology basis, an earlier work of Gholamreza Akbari Estahbanati (now known as Cyrus P. Aryana) [Proc. of The Amer. Math. Soc., vol. 124, **9** (1996), 2737-2744]. (Received September 19, 2010)