On the bass note of a Schottky group

by

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Introduction

1.1 Classical Schottky groups

Let $C_1, \ldots, C_n$ be a collection of circles in the Riemann sphere that bound disjoint open disks $D_1, \ldots, D_n$. Note that circles may be tangent, but otherwise they don't intersect. (See Figure 1.) Let F denote the complement of $D_1 \cup \ldots \cup D_n$, that is, the closure of the common exterior of $C_1, \ldots, C_n$. Suppose that n is even, and that for $i=1, \ldots, n/2$ we have specified a Möbius transformation γ_i mapping the exterior of C_{2i-1} to the interior of C_{2i}. The group Γ of Möbius transformations generated by the γ_i's is a Kleinian group with fundamental domain F. It is called a *classical Schottky group*.

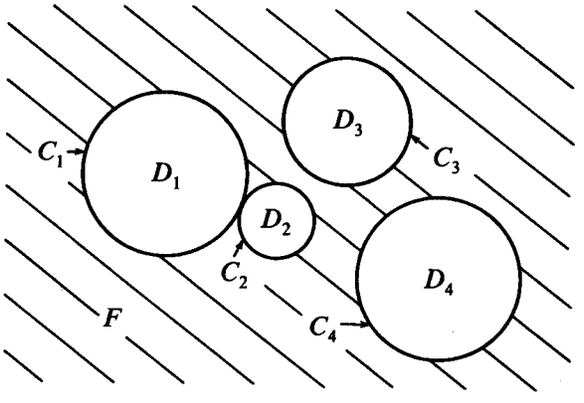

Fig. 1. Circles in the Riemann sphere.