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Fuchsian Schottky groups

 Definition. Fuchsian Schottky groups

Let

$$L_1, \dots, L_m, L'_1, \dots, L'_m$$

be $2m$ pairwise non-intersecting geodesic lines in $\mathbb{R}\boldsymbol{H}^2$ and $g_1, \dots, g_m \in PSL(2)(\mathbb{R})$ be such that

$$\begin{aligned} L_k &\stackrel{g_k}{\mapsto} L'_k \\ P_k \cap g_k(P_k) &= L'_k \end{aligned}$$

for each k where P_k is the convex polyhedron with sides L_k, L'_k . Then

$$\Gamma := \langle g_1, \dots, g_m \rangle$$

is a **Fuchsian Schottky group**.

If no pair among the $2m$ sides intersect in $\overline{\mathbb{R}\boldsymbol{H}^2}$, then Γ is a **Fuchsian ultra-Schottky** group, otherwise it is a **Fuchsian sub-Schottky**.