1042-51-135 Shinpei Baba* (shinpei@math.ucdavis.edu). Complex projective structures with a Schottky holonomy.

A Schottky group in $PSL(2, \mathbb{C})$ induces an open hyperbolic handlebody and its ideal boundary is a closed orientable surface S whose genus is equal to the rank of the Schottky group. The boundary surface is equipped with a (complex) projective structure and its holonomy representation is an epimorphism from $\pi_1(S)$ to the Schottky group. We show that an arbitrary projective structure with the same holonomy representation is obtained by grafting the basic structure described above.

This result is an analogue to the characterization of the projective structures whose holonomy representation is an isomorphism from $\pi_1(S)$ to a fixed quasifuchsian group, which was given by Goldman in 1987. (Received August 18, 2008)