1035-53-1171 **Shinpei Baba*** (shinpei@math.ucdavis.edu), Mathematical Sciences Building, One Shields Ave., University of California, Davis, CA 95616. *Admissible Decomposition of Complex Projective Structures.*

Let S be a closed orientable surface of genus at least two, and let C be an arbitrary complex projective structure on S, i.e. a $(\hat{\mathbb{C}}, \mathrm{PSL}(2,\mathbb{C}))$-structure. We show that there is a decomposition of S into pairs of pants and cylinders such that the restriction of C to each component has an injective developing map and a discrete faithful holonomy representation. This decomposition implies that every complex projective structure can be obtained by the construction of Gallo, Kapovich, and Marden.

A grafting is an operation on a complex projective structure to obtain a new structure, preserving the holonomy representation. Along the way to prove the decomposition theorem, we show that there is an admissible loop on (S, C), along which a grafting can be done. (Received September 18, 2007)