1109-14-25 **Changho Keem*** (ckeem1@gmail.com), Department of Mathematics, College of Natural Sciences, Seoul National University, Seoul, 151-742, South Korea, and **Yun-Hwan Kim**, Department of Mathematics, College of Natural Sciences, Seoul National University, Seoul, 151-742, South Korea. *On rigid components of the Hilbert scheme of smooth projective curves.*

Denote by $\mathcal{H}_{d,g,r}$ the Hilbert scheme of smooth curves which is the union of components whose general point corresponds to smooth irreducible and non-degenerate curve of degree d and genus $g > 0$ in $\mathbb{P}^r$. A rigid component of $\mathcal{H}_{d,g,r}$ is an irreducible component of $\mathcal{H}_{d,g,r}$ whose image under the natural map $\pi : \mathcal{H}_{d,g,r} \to \mathcal{M}_g$ is just one point. In this note, we provide a proof of the fact that $\mathcal{H}_{d,g,r}$ has no rigid component for $r = 3$. In case $r \geq 4$, we also prove the non-existence of a rigid component in a certain range of d, g and r . (Received December 31, 2014)