

Automorphism group of smooth hypersurfaces

Xun Yu

November 20, 2024

Ref: <https://arxiv.org/abs/2405.09505> Consider $X_{n,d} \subset \mathbb{P}^{n+1}$ is

- CY
- fano
-

Theorem 0.1 (matsumura-monsky). *for $n \geq 2, d \geq 3$, $\text{Aut}X_{n,d} = \text{Lin}(X)$ is finite.*

Where $\text{Lin}(X)$ are autos that extends to auto of \mathbb{P}^{n+1}

conterquestion: Given finite $G \subset PGL(n+2)$, find F and $X = V(F)$.

Remark 0.2. *A lot computation is done by computers.*