



On the Demailly-Semple jet bundles of hypersurfaces in \mathbb{CP}^3

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Let X be a smooth hypersurface of degree d in \mathbb{CP}^3 . By totally algebraic calculations, we prove that on the third Demailly-Semple jet bundle X_3 of X , the bundle $\text{local}_{X_3}(1)$ is big for $d \geq 11$, and that on the fourth Demailly-Semple jet bundle X_4 of X , the bundle $\text{local}_{X_4}(1)$ is big for $d \geq 10$, improving a recent result of Diverio.

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