ON THE 2-DIMENSIONAL JACOBIAN CONJECTURE AND
AFFINE VARIETIES CONTAINING $\mathbb{C}^2$

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Abstract. The two-dimensional Jacobian Conjecture is equivalent to the non-
existence of a map of complex varieties $f : V \to \mathbb{C}^2$ where $V$ is an affine variety
properly containing $\mathbb{C}^2$ as an open subvariety, $f$ restricted to $\mathbb{C}^2$ has constant non-
zero Jacobian determinant, $V - \mathbb{C}^2$ is a (possibly singular) rational curve whose
 normalization is $C^1$, and $V$ admits a map to $CP^1$ making it a $C^1$-bundle over $CP^1$.
We show the non-existence of such a map $f$ for a large class of such affine varieties $V$.

References

1. David Wright Affine surfaces fibered by affine lines over the projective line, Ill. Jour. Math.,
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