



Correction to: The Cremona problem in dimension 2

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Correction to: Arch. Math. (2022) 119:53–62

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The proof of the main result of the original article [1] is wrong.

The original article claims to prove the Jacobian conjecture in dimension 2. After publication, the author and later the editors learned from Makar-Limanov that the method of proof cannot work as claimed. In an email to Makar-Limanov from October 31st 2022, the author admitted:

“You are right that Proposition 2.3 must be wrong. It took me a certain time to find out, where the fault is located. It is hidden at the very end of the proof of Proposition 2.3:

A fibre of $(f - G, g^{1/k})|_V$ gives rise to a fibre of $(f, g^{1/k})|_V$ with the same cardinality, but the thing does not work “vice versa”. So my argument is not valid. Consequently there will come out an “erratum”, which comes up to a withdrawal of the whole paper.

Sincerely Yours, Wolfgang Bartenwerfer”

As we did not receive the promised erratum by the deadline December 31st 2022, the editors in chief of the Archiv der Mathematik decided to publish this note as an erratum.

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Reference

- [1] Bartenwerfer, W.: The Cremona problem in dimension 2. Arch. Math. (Basel) **119**(1), 53–62 (2022)

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