Erratum on

"Convex integration for the Monge-Ampère equation in two dimensions"

The proof of the announced result [1, Theorem 1.4] was supposed to appear in a forthcoming paper, but a gap was found. The obstacle is not overcome to this moment and the statement remains an open problem in its full generality. The only progress which has been made concerns when the domain Ω is the full plane \mathbb{R}^2 [2, Theorem 3]. In that case the result has been proved assuming that f is merely an arbitrary nonzero nonnegative distribution.

References

- [1] M. Lewicka and M.R. Pakzad, Convex integration for the Monge-Ampère equation in two dimensions, Analysis and PDE, Vol. 10 (2017), No. 3, 695–727.
- [2] M.R. Pakzad, Convexity of weakly regular surfaces of distributional nonnegative intrinsic curvature, arXiv e-print (2022), arXiv:2206.09224.