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Numerical study and examples on singularities of solutions to anisotropic crystalline curvature flows of nonconvex polygonal curves. (English) [Zbl 1143.35308](#)

Kozono, Hideo (ed.) et al., Asymptotic analysis and singularities. Elliptic and parabolic PDEs and related problems. Papers of the 14th International Research Institute of the Mathematical Society of Japan (MSJ), Sendai, Japan, July, 18–27, 2005. Tokyo: Mathematical Society of Japan (ISBN 978-4-931469-41-9/hbk). Advanced Studies in Pure Mathematics 47-2, 543-563 (2007).

The authors develop a complete numerical study and examples on singularities for anisotropic crystalline curvature flows of non-convex polygonal curves. The method is presented with a number of examples and illustration and finally experiments are performed for illustration.

For the entire collection see [\[Zbl 1130.35004\]](#).

Reviewer: [Prabhat Kumar Mahanti \(Saint John\)](#)

MSC:

- [35A35](#) Theoretical approximation in context of PDEs
- [35R60](#) PDEs with randomness, stochastic partial differential equations
- [35A20](#) Analyticity in context of PDEs
- [53C44](#) Geometric evolution equations (mean curvature flow, Ricci flow, etc.) (MSC2010)

Cited in **3** Documents

Keywords:

[singularities](#); [curvature](#); [splitting](#); [polygon curve](#)