

Alexandrov immersed mean curvature flow

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In this talk I will introduce Alexandrov immersed mean curvature flow and extend Andrew's non-collapsing estimate to include Alexandrov immersed surfaces. This estimate implies an all-important gradient estimate for the flow and allows mean curvature flow with surgery to be extended beyond flows of embedded surfaces to the Alexandrov immersed case.

Acknowledgements

Joint work with Elena Mäder-Baumdicker.

References

- [1] B. Andrews, M. Langford and J. McCoy, *Non-collapsing in fully non-linear curvature flows*, Ann. Inst. Henri Poincaré (C) Anal. Non Linéaire, **30**(1) (2013) 23–32.
- [2] B. Lambert and E. Mäder-Baumdicker, *A Note on Alexandrov Immersed Mean Curvature Flow*, J. Geom. Anal., **34** (2024) article no 268.