

PLATEAU'S PROBLEM FOR SINGULAR CURVES

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The most classical version of the problem of Plateau asks to find a disc of least area bounding a given Jordan curve Γ in \mathbb{R}^3 . Surprisingly the classical approaches break down when Γ is allowed to have self-intersections. In the talk we will discuss the solution of Plateau's problem for such singular curves given in [Cre19]. The proof relies on the solution of Plateau's problem for Jordan curves in singular metric spaces obtained by Lytchak and Wenger in [LW17].

REFERENCES

- [Cre19] Paul Creutz. Plateau's problem for singular curves. preprint arxiv, 2019.
- [LW17] Alexander Lytchak and Stefan Wenger. Area minimizing discs in metric spaces. *Arch. Ration. Mech. Anal.*, 223(3):1123–1182, 2017.