

MINIMAL SURFACE GENERATING FLOW

JÍŘÍ MINARČÍK

Department of Mathematics, FNSPE, Czech Technical U., Czech Republic

E-mail: jiri.minarcik@fjfi.cvut.cz

ABSTRACT

Minimal surfaces are abundant in nature, from the shape of grain boundaries and soap films to the apparent horizon of a black hole. In this contribution, we discuss how minimal surfaces can be generated via geometric flow of space curves. We present two different approaches, discuss their possible applications and outline future work.

This is a joint work Michal Beneš.

- [1] Minarčík, J., Beneš M. 2022 Minimal surface generating flow for space curves of non-vanishing torsion. *Discrete & Continuous Dynamical Systems B*, to appear.
- [2] Minarčík, J., Beneš, M. 2022 Non-degenerate homotopy and geometric flows. *Homology, Homotopy and Applications*, to appear.