# **Publication List**

## Publications in Impact Factor Journals

- J. Minarčík, M. Beneš: Minimal surface generating flow for space curves of non vanishing torsion. Homology, Discrete and Continuous Dynamical Systems Series B, 27: 6605–6617, 2022, doi: 10.3934/dcdsb.2022011.
- J. Minarčík and M. Beneš: Nondegenerate Homotopy and Geometric Flows. Homology, Homotopy and Applications, 24: 255–264, 2022, doi: 10.4310/HHA.2022.v24.n2.a12.
- J. Minarčík, M. Beneš: Long-term behavior of curve shortening flow in R<sup>3</sup>. SIAM Journal on Mathematical Analysis, 52(2):1221−1231, 2020, doi: 10.1137/19M1248522.
- J. Minarčík, M. Kimura, M. Beneš: Comparing motion of curves and hypersurfaces in  $\mathbb{R}^m$ . Discrete & Continuous Dynamical Systems B, 24(9):4815–4826, 2019, doi: 10.3934/dcdsb.2019032.

#### PREPRINTS

• J. Minarčík, M. Beneš: Trajectory Surfaces of Framed Curvature Flow, 2023.

## Conference Contributions

- International workshop BIGW: Geometric flows and related topics, Inverness, Scotland, July, 2023.
  - Lecture: Ricci flow invariant curvature conditions
- International workshop
  Tangled in Knot Theory, ICERM, The Institute for Computational and Experimental
  Research in Mathematics, Brown University, Providence, United States, May, 2023.
  - Oral presentation: Minimal Surface Generating Flow

International workshop

Workshop on scientific computing 2023, Děčín, May, 2023.

- Oral presentation: Trajectory Surfaces of Framed Curvature Flow
- International seminar

Discussion meeting on zero mean curvature surfaces in the Lorentz-Minkowski space and related areas, online, Shiv Nadar University NCR Delhi, October, 2022.

- Oral presentation: Minimal Surface Generating Flow
- International seminar

Interfaces: Modeling, Analysis, Numerics, Oberwolfach Research Institute for Mathematics, Oberwolfach, Germany, November 2022.

- Oral presentation: Framed Curvature Flow
- International conference

Topological Methods in Mathematical Physics, EMFCSC: International School of Mathematics, Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Italy, September 2022.

- Oral presentation: Minimal Surface Generating Flow
- International workshop

Workshop on scientific computing 2022, Děčín, December, 2022.

- Oral presentation: Discrete Torsion
- International conference

Calculus of Variations in Probability and Geometry, UCLA, Institute for Pure & Applied Mathematics, Los Angeles, United States, February, 2022.

- Poster presentation: Minimal Surface Generating Flow
- International seminar

Combinatorial and Geometric Knot Theory, Oberwolfach Research Institute for Mathematics, Oberwolfach, Germany, November 2021.

- Oral presentation: Locally Convex Knots
- International workshop

Young Geometers Meeting, University of Copenhagen, Online, April, 2021.

- Oral presentation: Minimal surface generating flow for space curves of nonvanishing torsion
- International workshop

Winterschool on Analysis and Applied Mathematics, University of Münster, Online, February, 2021.

- Poster: Minimal surface generating flow for space curves of non-vanishing torsion

## • International conference

Czech-Japanese Seminar in Applied Mathematics, Online, January, 2021.

- Oral presentation: Minimal surface generating flow for space curves of nonvanishing torsion

## • International workshop

Workshop on scientific computing 2020, Online, December, 2020.

 Oral presentation: Minimal surface generating flow for space curves of nonvanishing torsion

## • International conference

BJUT Conference - Knotted Fields and Applications, Beijing, China, September, 2019.

- Oral presentation: Minimal surface generating flow for space curves of nonvanishing torsion
- Poster: Properties of codimension-two curve shortening flow

#### International workshop

Biology, Analysis, Geometry, Energies, Links: A Program on Low-dimensional Topology, Geometry, and Applications, Minneapolis, United States, June, 2019.

Poster: Properties of codimension-two curve shortening flow

## Seminar

Nečas Seminar on Continuum Mechanics, MFF UK, Prague, Czech Republic, February, 2019.

- Oral presentation: Properties of codimension-two curve shortening flow

## • International conference

Czech-Japanese Seminar in Applied Mathematics 2018 (CJS2018), Noto, Japan, July, 2018.

 Oral presentation: Curvature driven flow of space curves in normal and binormal direction

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Czech-Japanese Seminar in Applied Mathematics 2018 (CJS2018), Noto, Japan, July, 2018.

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## • International workshop

Workshop on scientific computing 2018, Děčín, Czech Republic, June, 2018.

 Oral presentation: Curvature driven flow of space curves in normal and binormal direction

- International workshop 7th conference of the Visual Computing Competence Center, Havlíčkův Brod, Czech Republic, November, 2017.
  - Oral presentation: Automatic identification of trains from images
- International conference

Future Port Prague 2017, Prague, Czech Republic, September, 2017.

- Oral presentation: AI in machine vision
- International conference

International Symposium on Computational Science 2017, Kanazawa, Japan, July, 2017.

- Oral presentation: Curvature driven flow of space curves in normal and binormal direction
- International workshop
   14th Workshop on Mathematical Analysis for Nonlinear Phenomena, Kanazawa, Japan,
   July, 2017.
  - Oral presentation: Curvature driven flow of space curves in normal and binormal direction
- International workshop

Workshop on scientific computing 2018, Děčín, Czech Republic, June, 2017.

- Oral presentation: Curvature driven flow of space curves in normal and binormal direction
- International workshop

Workshop on scientific computing 2017, Děčín, Czech Republic, June, 2017.

- Oral presentation: Curvature driven flow of space curves in normal and binormal direction
- International workshop

Workshop on scientific computing 2016, Děčín, Czech Republic, June, 2016.

- Oral presentation: Applications of planar and space curve evolution
- International workshop

Workshop on scientific computing 2015, Děčín, Czech Republic, June, 2015.

 Oral presentation: Numerical solution of a curvature driven flow of plane and space curves and its applications