

SHORT CURRICULUM VITAE OF THE CANDIDATE

Name and Surname: Vito Vitrih.

Date of Birth: March 27, 1981.

Citizenship: Slovenian.

E-mail: vito.vitrih@upr.si.

Address: UP IAM, Muzejski trg 2, 6000 Koper,
; UP FAMNIT, Glagoljaka 8, 6000 Koper.

URL: <http://osebje.famnit.upr.si/vito.vitrih/index-eng.html>.

ORCID ID: <https://orcid.org/0000-0001-5920-5092>.

MR Author ID: <https://mathscinet.ams.org/mathscinet/author?authorId=823105>.

Education:

2000 – 2005: University of Ljubljana, Faculty of Mathematics and Physics, undergraduate studies.

2005 – 2010: University of Ljubljana, Faculty of Mathematics and Physics, doctoral studies.

Academic/Research Career:

09/2020 – : Full Professor (field of Mathematics) and Senior Scientific Advisor, University of Primorska.

12/2012 – : Director of the Andrej Marušič Institute (UP IAM).

09/2020 – : Coordinator of the Mathematical Sciences study program, UP Famnit.

05/2012 – : Member of the Senate of the University of Primorska.

03/2012 – 05/2012: Visiting researcher at Johannes Kepler University, Linz, Austria.

01/2012 – 12/2012 : Head of the Department of Mathematics at UP IAM.

2015 – 09/2020: Associate Professor in the field of Mathematics and Senior Research Associate.

2011 – 11/2015: Assistant Professor in the field of Mathematics and Research Associate at UP.

01/2019 – : Member of the research program P1-0404.

10/2005 – 12/2018 : Member of the research program P1-0285.

02/2023 - 02/2026: Principal investigator of the adapted ARIS project (N1-0296).

07/2011 - 06/2013: Principal investigator of a postdoctoral project (Z7-4052).

2016 - : Member of the Management Board and Treasurer of the SDAMS Society.

04/2010: PhD in Mathematics, University of Ljubljana, FMF.

10/2005 – 04/2010: Young Researcher at UP IAM.

10/2005 – : Employed at UP.

Research Work:

His research focuses on topics in numerical analysis (especially approximation and numerical solving of partial differential equations) and Computer-Aided Geometric Design (CAGD). His primary interests include isogeometric analysis, geometric interpolation, interpolation with Pythagorean hodograph curves, and spline approximation. He conducts research both independently and in collaboration with researchers from Slovenia and abroad.

Scientific Achievements:

Zois Award for important achievements in the field of numerical mathematics (2024).

45 original SCI mathematical articles, of which 32 are in Q1 and 8 in Q2 journals.

One article (also selected in the ARIS Excellent in Science for the year 2020) ranks in group A".

Number of pure citations (CI10) in the last 10 years: 279 (Scopus), 240 (WoS), and 641 (Google Scholar).

Socio-Economic Relevant Achievements:

01/2015 – : Editor of the SCI journal *Ars Mathematica Contemporanea*.

01/2017 – : Editor of the scientific journal *The Art of Discrete and Applied Mathematics*.

2021 - 2022: Guest editor of the special issue *From theoretical to applied geometry “New trends on the interaction of theoretical and applied geometry”* in *Computer Aided Geometric Design (CAGD)*.

Member of the Organizing Committee of the 8th European Congress of Mathematics 2021.

Supervision: 1 doctoral dissertation (+ one nearing completion), 6 master’s theses, 7 final project theses.

Member of the Organizing Committee of several international scientific meetings.

Selection of 10 Original Scientific Articles:

- KAPL, M., VITRIH, V., JUETTLER, B., BIRNER, K., Isogeometric analysis with geometrically continuous functions on two-patch geometries. *Computers & mathematics with applications*, 2015, vol. 70, iss. 7, p. 1518-1538.
- KAPL, M., VITRIH, V., Isogeometric collocation on planar multi-patch domains. *Computer methods in applied mechanics and engineering*, 2020, vol. 360, p. 1-23.
- KAPL, M., KOSMAČ, A., VITRIH, V., Isogeometric collocation for solving the biharmonic equation over planar multi-patch domains. *Computer methods in applied mechanics and engineering*, 2024, vol. 424, art. 116882.
- KAPL, M., VITRIH, V., Space of C^2 -smooth geometrically continuous isogeometric functions on two-patch geometries. *Computers & mathematics with applications*, 2017, vol. 73, iss. 1, p. 37-59.
- GROŠELJ, J., KAPL, M., KNEZ, M., TAKACS, T., VITRIH, V., A super-smooth C^1 spline space over planar mixed triangle and quadrilateral meshes. *Computers & mathematics with applications*, 2020, vol. 80, iss. 12, p. 2623-2643.
- KAPL, M., VITRIH, V., C^1 isogeometric spline space for trilinearly parameterized multi-patch volumes. *Computers & mathematics with applications*, 2022, vol. 117, p. 53-68.
- KAPL, M., VITRIH, V., C^s -smooth isogeometric spline spaces over planar bilinear multi-patch parameterizations. *Advances in computational mathematics*, 2021, vol. 47, p. 1-34.
- KNEZ, M., VITRIH, V., Motion design with Euler-Rodrigues frames of quintic Pythagorean-hodograph curves. *Mathematics and computers in simulation: transactions of IMACS*, 2012, vol. 82, iss. 9, p. 1696-1711.
- FAROUKI, R. A. M. T., KNEZ, M., VITRIH, V., ŽAGAR, E., On the construction of polynomial minimal surfaces with Pythagorean normals. *Applied mathematics and computation*, 2022, vol. 435, p. 1-12.
- FAROUKI, R. A. M. T., KNEZ, M., VITRIH, V., ŽAGAR, E., Planar projections of spatial Pythagorean-hodograph curves. *Computer Aided Geometric Design*, 2021, vol. 91, art. 102049.

Koper, 10. 7. 2025

prof. dr. Vito Vitrih