Svajūnas SAJAVIČIUS

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BACKGROUND

Svajūnas Sajavičius graduated from Vilnius University (Lithuania) with BSc (2007) and MSc (2009) degrees in Mathematics, and a PhD degree (2013) in Computer Science. Before joining Kaunas University of Technology, he worked at universities in Lithuania as assistant/associate professor, and at Institute of Applied Geometry of Johannes Kepler University Linz (Austria) as a postdoctoral researcher in EU-funded project. His research interests include discretization methods for partial differential equations (PDEs) and computer aided geometric design (with special focus on applications in isogeometric analysis). Dr Sajavičius is an author of over 10 papers in refereed journals and conference proceedings, and a participant of various international conferences and congresses. In addition, he has more than six years of experience in teaching at universities.

HIGHLIGHTS

- International research experience in EU-funded project with partners from academia and industry
- Strong focus on research output quality and publications in high impact international journals
- University teaching experience in broad variety of math and computer science courses

CURRENT POSITION

Associate Professor
Department of Software Engineering, Faculty of Informatics,
Kaunas University of Technology, Kaunas, Lithuania

EDUCATION

PhD Computer science 2009–2013
Faculty of Mathematics and Informatics, Vilnius University, Lithuania

MSc Mathematics 2007–2009
Faculty of Mathematics and Informatics, Vilnius University, Lithuania

BSc Mathematics 2003–2007
Faculty of Mathematics and Informatics, Vilnius University, Lithuania

PROFESSIONAL EXPERIENCE

Associate Professor Since
Department of Software Engineering, Faculty of Informatics September 2018
Kaunas University of Technology, Kaunas, Lithuania

Postdoctoral Researcher 2015–2018
Institute of Applied Geometry, Faculty of Engineering and Natural Sciences (TNF)
Johannes Kepler University Linz, Austria

Associate Professor 2014–2020
Institute of Economics (Department of Mathematical Modelling, till December 2016; Department of Finance and Taxes, till May 2016), Faculty of Economics and Business (Faculty of Economics and Finance Management, till December 2016)
Mykolas Romeris University, Vilnius, Lithuania

Lecturer 2010–2016
Department of Computer Science II, Faculty of Mathematics and Informatics
Vilnius University, Vilnius, Lithuania

Lecturer 2009–2013
Department of Mathematical Modelling, Faculty of Economics and Finance Management (Faculty of Social Informatics, till December 2012)
Mykolas Romeris University, Vilnius, Lithuania

Junior lecturer 2009–2010
Department of Computer Science II, Faculty of Mathematics and Informatics
Vilnius University, Vilnius, Lithuania

RESEARCH

Research interests

- Discretization methods for PDEs (isogeometric analysis, meshless methods)
- Computer aided geometric design (applications in isogeometric analysis)

Publications

Full list of publications is presented at page7

Summary

Publications in:	*Number of papers*
Journals and editions indexed in *Clarivate Analytics Web of Science*	9
Other indexed journals and editions	3
Other refereed editions	4

Journals indexed in Journal Citation Reports (JCR)	*Impact Factor (2019)*	*Journal rank (2019)*	*Number of papers*
Applied Mathematics and Computation	3.472	Q1	1
Computers and Mathematics with Applications	3.370	Q1	2
Engineering Analysis with Boundary Elements	2.884	Q1/Q2	2
Nonlinear Analysis: Modelling and Control	2.780	Q1/Q2	2

Citation report (Clarivate Analytics Web of Science, August 2020)

Results found:	9
h-index:	4
Average Citations per Item:	6.22
Sum of the Times Cited:	56
Sum of Times Cited without self-citations:	41
Citing Articles:	42
Citing Articles without self-citations:	35

Citation distribution across journals

Advances in Applied Mathematics and Mechanics (1), Advances in Difference Equations (4), Applied Mathematical Modelling (3), Applied Mathematics and Computation (2), Boundary Value Problems (2), Complex Variable and Elliptic Equations (1), Computers & Mathematics with Applications (5), Electronic Journal of Differential Equations (1), Engineering Analysis with Boundary Elements (1), EURASIP Journal on Advances in Signal Processing (1), Integral Transforms and Special Functions (1), International Journal of Greenhouse Gas Control (1), International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (1), Journal of Computational and Applied Mathematics (1),Journal of Computational and Nonlinear Dynamics (1), Lithuanian Mathematical Journal (1), Mathematical Modelling and Analysis (2), Mediterranean Journal of Mathematics (1), Neural Processing Letters (1), Nonlinear Analysis: Modelling and Control (6), Numerical Algorithms (1), Numerical Methods for Partial Differential Equations (1), Numerical Functional Analysis and Optimization (2)

Publication distinctions

- #9 in *SciVerse ScienceDirect TOP25 – List of most downloaded articles* for Engineering Analysis with Boundary Elements – January to December 2013 (full year)

- #25 in *SciVerse ScienceDirect TOP25 – List of most downloaded articles* for Engineering Analysis with Boundary Elements – July to September 2013
- #2 in *SciVerse ScienceDirect TOP25 – List of most downloaded articles* for Engineering Analysis with Boundary Elements – April to June 2013
- #10 in *SciVerse ScienceDirect TOP25 – List of most downloaded articles* for Computers and Mathematics with Applications – October to December 2012

Participation in research projects

- MOTOR – Multi-ObjecTive design Optimization of fluid eneRgy machines (funded by European Commission through Horizon 2020 programme, project reference: 678727), 2015–2018
- BalticGrid-II project (funded by the EU within the framework of the 7th Framework Programme, Contract No. 223807), 2010
- Development of Bioelectrocatalysis for Synthesis and Analysis (BIOSA), #N–08007, Lithuanian State Science and Studies Foundation, 2008
- Computer Simulation of the Behavior of Heterogeneous Processes and Systems (MODELITA), #C–03048, Lithuanian State Science and Studies Foundation, 2005, 2006

Other projects

- Participation in International Congress on Industrial and Applied Mathematics (ICIAM 2019), 09.3.3-LMT-K-712-13-0037. Project is funded by EU Structural Funds according to the 2014–2020 Operational Programme for the European Union Funds' Investments priority "Development of scientific competence of researchers, other researchers, students through practical scientific activities" under Measure No. 09.3.3-LMT-K-712

Invited presentations/talks

- Seminar Geometrie, Institute of Applied Geometry, Johannes Kepler University Linz, 19 May, 2020, Linz, Austria (virtual presentation)
- Seminar Geometrie: Recent Results in Computer Aided Geometric Design, Institute of Applied Geometry, Johannes Kepler University Linz, 24 September, 2015, Linz, Austria

Contributed presentations/talks in international conferences and congresses

- Virtual Isogeometric Analysis 2020, organised by U.S. Association for Computational Mechanics (USACM), August 11–12, 2020 (online presentation)
- 9th International Congress on Industrial and Applied Mathematics (ICIAM2019), Valencia, Spain, July 15–19, 2019
- 9th International Conference on Mathematical Methods for Curves and Surfaces (MMCS9), 23–28 June, 2016, Tønsberg, Norway
- Equadiff'13 conference, 25–30 August, 2013, Prague, Czech Republic
- Congress on Numerical Methods in Engineering (CMN 2013), 25–28 June, 2013, Bilbao, Spain
- 6th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012), 10–14 September, 2012, Vienna, Austria
- International Conference on Applied Mathematics and Approximation Theory (AMAT 2012), 17–20 May, 2012, Ankara, Turkey
- 7th International Congress on Industrial and Applied Mathematics (ICIAM 2011), 18–22 July, 2011, Vancouver, BC, Canada
- 16th International Conference Mathematical Modelling and Analysis, 25–28 May, 2011, Sigulda, Latvia
- 23rd Nordic Seminar on Computational Mechanics, 21–22 October, 2010, Stockholm, Sweden
- V European Conference on Computational Fluid Dynamics (ECCOMAS CFD 2010), 14–17 June, 2010, Lisbon, Portugal
- 15th International Conference Mathematical Modelling and Analysis, 26–29 May, 2010, Druskininkai, Lithuania
- 22nd Nordic Seminar on Computational Mechanics, 22–23 October, 2009, Aalborg, Denmark
- International Conference Differential Equations and Their Applications dedicated to Professor M. Sapagovas 70th anniversary, 10–12 September, 2009, Panevėžys, Lithuania

- 14th International Conference Mathematical Modelling and Analysis, 27–30 May, 2009, Daugavpils, Latvia

Attending various international events

- LMS-Bath Symposium on the Mathematics of Machine Learning, 3–7 August, 2020, University of Bath (event was held online)
- JuliaCon 2020, 29–31 July, 2020 (online)
- British Early Career Mathematicians' Colloquium, 14–15 July, 2020 (virtual colloquium)
- Symposium on Solid and Physical Modeling (SPM 2020) co-located with the Shape Modeling International (SMI 2020), June 2–4, 2020, Strasbourg, France (held online due to the coronavirus outbreak)
- G+Smo developer days 2018, 7–9 May, 2018, Öckerö, Sweden
- G+Smo developer days 2017, 1–3 February, 2017, Delft, Netherlands
- Parameterisation roundtable meeting, 30–31 January, 2017, Delft, Netherlands
- Workshop on Function Approximation, 1–2 December, 2016, Linz, Austria
- International Symposium and Winter-School on Modeling, Adaptive Discretizations and Solvers for Fluid-Structure Interaction, 11–15 January, 2016, Linz, Austria
- G+Smo Workshop / G+Smo developer days 2015, 24–27 November, 2015, Linz, Austria
- 13th Workshop on Interactions Between Dynamical Systems and Partial Differential Equations / Jornades d'Interacció entre Sistemes Dinàmics i Equacions en Derivades Parcials (JISD2015), 1–5 June, 2015, Barcelona
- FORCE2015 Research Communication and e-Scholarship Conference, 12–13 January, 2015, Oxford, United Kingdom
- The 2014 International Summer School on HPC Challenges in Computational Sciences, 1–6 June, 2014, Budapest, Hungary
- Beyond the PDF2 Conference, 19–20 March, 2013, Amsterdam, Netherlands
- 6th European Congress of Mathematics (6ecm), July 2–7, 2012, Kraków, Poland
- Fifth RISC/SCIEnce Training School in Symbolic Computation, 28 June – 9 July, 2010, Hagenberg, Austria
- Summer School Modern Data Mining Technologies / Vasaros mokykla Modernios duomenų gavybos technologijos, 9–15 September, 2007, Druskininkai, Lithuania

Visits at universities, research centres and companies

- Technical University of Dortmund, 19–20 October, 2017, Dortmund, Germany
- MTU Aero Engines AG, 27–28 April, 2017, Munich, Germany
- Delft University of Technology, 30 January – 3 February, 2017, Delft, Netherlands
- Faculty of Applied Sciences, University of West Bohemia, 24–25 November, 2016, Plzen, Czech Republic
- The von Karman Institute for Fluid Dynamics (VKI), 13–14 April, 2016, Rhode-Saint-Genèse, Belgium
- Institute of Applied Geometry, Johannes Kepler University Linz, 24 September, 2015, Linz, Austria
- Budapest University of Technology and Economics (BME), 1–6 June, 2014, Budapest, Hungary
- Research Institute for Symbolic Computation (RISC), Johannes Kepler University Linz, 28 June – 9 July, 2010, Hagenberg im Mühlkreis, Austria

TEACHING

Kaunas University of Technology (since 2018)

- P175B014 *Data structures* – labs (Fall 2018, Fall 2019)
- P175B118 *Object-oriented programming 1*– labs (Fall 2018, Fall 2019)
- P175B123 *Object-oriented programming 2* – labs (Spring 2019, Spring 2020)
- P175B168 *Information technologies 1* – lectures and labs (Fall 2019)
- P175B301 *Information technologies 1* – labs (Spring 2019)

Mykolas Romeris University (2009–2020)

- *Applied mathematics and quantitative methods in management*– practical sessions (Spring 2010)

- *Basics of finance mathematics* – lectures and practical sessions (Fall 2015)
- *Calculus and linear algebra*– lectures and practical sessions (Fall 2012)
- *Data Structures and Algorithms*[*†]– lectures and practical sessions (Spring 2019, Spring 2020)
- *Databases* – lectures and practical sessions (Fall 2018 (part-time studies))
- *Discrete structures*[*‡]– lectures and practical sessions (Spring 2012, Spring 2013, Spring 2014 (in English and Lithuanian), Spring 2015 (in English))
- *Game Mathematics*[*†] – lectures and practical sessions (Spring 2019)
- *Mathematical logic*– lectures and practical sessions (Spring 2010, Spring 2011)
- *Mathematical statistics*[*‡] – lectures and practical sessions (Spring 2013, Spring 2014 (part-time studies), Spring 2015 (in English))
- *Mathematical statistics and methods of statistical analysis I*[*]– lectures and practical sessions (Fall 2013 (in English))
- *Mathematical statistics and methods of statistical analysis II*[*]– lectures and practical sessions (Spring 2014 (in English))
- *Mathematics*[*] – lectures and practical sessions (Fall 2019)
- *Numerical methods*– lectures and practical sessions (Fall 2010, Fall 2011)
- *Theory of probability and mathematical statistics*[*‡]– lectures and practical sessions (Spring 2011, Spring 2014 (in English), Spring 2015 (in English), Spring 2020 (in English))

Vilnius University (2009–2016)

- *Algorithms and data structures*– labs (Spring 2010)
- *Data analysis*– labs (Spring 2011, Spring 2012)
- *Data structures*– labs (Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014)
- *Data structures and algorithms* – labs (Fall 2013, Fall 2014)
- *Human-computer interaction*– labs (Spring 2010)
- *Practical informatics*–lectures and labs (Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014)

ADMINISTRATIVE ACTIVITIES

- Member, Committee of Finance Economics bachelor studies programme (Mykolas Romeris University, Faculty of Economics and Finance Management), 2014–2015

PROFESSIONAL SERVICES

Conferences

- Chairman of session *Geometry Processing I* in *Symposium on Solid and Physical Modeling (SPM 2020)*, June 2–4, 2020, Strasbourg, France (held online due to the coronavirus outbreak)
- Chairman of scientific session *Numerical Analysis V* in *9th International Congress on Industrial and Applied Mathematics (ICIAM2019)*, July 15–19, 2019, Valencia, Spain
- Member of Technical Programme Committee, *International Conference on Service Science, Technology and Engineering (SSTE2017)*, June23–25, 2017, Suzhou, China

Reviewing for international journals

- *Acoustics* (MDPI), since 2020
- *Processes* (MDPI), since 2020
- *Algorithms* (MDPI), since 2019
- *Applied Mathematics and Computation* (Elsevier), since 2019
- *Sustainability* (MDPI), since 2019
- *IEEE Access* (IEEE), since 2019
- *Symmetry* (MDPI), since 2019
- *Mathematics* (MDPI), since 2018
- *Numerical Algorithms* (Springer), since 2018

[*]Courses taught in English
[†]Courses taught in joint study programme with Dongseo University (South Korea)
[‡]Courses taught in dual diploma programmes validated by Middlesex University London, UK.

- *Numerical Mathematics: Theory, Methods and Applications* (Cambridge University Press), since 2017
- *Science China Mathematics* (Springer), since 2017
- *Songklanakarin Journal of Science and Technology* (Prince of Songkla University, Thailand), since 2017
- *Iranian Journal of Science and Technology, Transactions A: Science* (Springer), since 2016
- *Inverse Problems in Science & Engineering* (Taylor & Francis), since 2016
- *Iranian Journal of Numerical Analysis and Optimization* (Ferdowsi University of Mashhad, Iran), since 2016
- *Mathematical Modelling and Analysis* (Taylor & Francis), since 2016
- *Journal of Applied Mathematics and Computing* (Springer), since 2015
- *Ain Shams Engineering Journal* (Elsevier), since 2015
- *International Journal of Computational Methods* (World Scientific Publishing), since 2015
- *Applied Mathematics – A Journal of Chinese Universities* (Springer), since 2014
- *Applied Mathematical Modelling* (Elsevier), since 2014
- *Expert Systems with Applications* (Elsevier), since 2014
- *Engineering Analysis with Boundary Elements* (Elsevier), since 2014
- *Nonlinear Analysis: Modelling and Control* (Vilnius University), since 2014
- *Journal of Computational and Applied Mathematics* (Elsevier), since 2013
- *Journal of Mathematics* (Hindawi Publishing Corporation), since 2012
- *Computers and Mathematics with Applications* (Elsevier), since 2012

Consulting

- Nature Research Centre, Lithuania, 2015–2016

Other

- Reviewer, *Zentralblatt MATH*, since 2012
- Reviewer, *Mathematical Reviews / MathSciNet*, since 2012

PROFESSIONAL MEMBERSHIPS

- *International Society of Difference Equations*, since 2020
- *Solid Modeling Association*, since 2019
- *International Computer Science and Engineering Society*, since 2018
- *Austrian Mathematical Society* (*Österreichische Mathematische Gesellschaft*), since 2018
- *International Association of Engineers* (IAENG), since 2014
- *American Mathematical Society* (AMS), 2013–2017
- *Society for Industrial and Applied Mathematics* (SIAM), 2011–2016

GRANTS AND RECOGNITIONS

Research activities

- Certificate of Appreciation (Kaunas University of Technology): Recognition of high quality publication output in the year 2018 (2019 Jan)
- Promotional doctoral scholarships for academic achievements, Lithuanian State Science and Studies Foundation (2010, 2011) and Research Council of Lithuania (2012, 2013)
- Students' research practice fellowship, Research Council of Lithuania (2008)

Reviewing activities

- Top Peer Reviewer 2019 (Mathematics) – Global Peer review Awards 2019 (Web of Science Group, a Clarivate Analytics company)
- Outstanding reviewer – Computers and Mathematics With Applications (Elsevier): Recognition of the contributions made to the quality of the journal (2017 Sept)

Travel grants

- Travel grant from European Mathematical Society, Committee for European Solidarity (2015)
- Support for doctoral academic visit, Research Council of Lithuania (2013)

- Support for short-term visits, allocated based on the project "The competitive funding of short-term researcher visits" under EU structural support, Research Council of Lithuania (2012, 2013)
- Support for research visit, Research Council of Lithuania (2011)
- Financial support (travel grants) from organisers of various international conferences, congresses and other events:
  - 13th Workshop on Interactions Between Dynamical Systems and Partial Differential Equations (JISD2015), 1–5 June, 2015, Barcelona (registration fee and accommodation expenses)
  - FORCE2015 Research Communication and e-Scholarship Conference, 12–13 January, 2015, Oxford, United Kingdom (Travel fellowship supported by Elsevier/Mendeley, Moore, The National Science Foundation, PLoS and Sloan)
  - The 2014 International Summer School on HPC Challenges in Computational Sciences, 1–6 June, 2014, Budapest, Hungary
  - Beyond the PDF2 Conference, 19–20 March, 2013, Amsterdam, Netherlands (Travel award sponsored by Elsevier)
  - 6th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012), 10–14 September, 2012, Vienna, Austria (registration fee and ECCOMAS scholarship to cover travel and accommodation expenses)
  - 6th European Congress of Mathematics (6ecm), July 2–7, 2012, Kraków, Poland (waved registration fee, accommodation expanses and local costs)
  - 7th International Congress on Industrial and Applied Mathematics (ICIAM 2011), 18–22 July, 2011, Vancouver, BC, Canada (registration fee and local expenses)
  - Fifth RISC/SCIEnce Training School in Symbolic Computation, 28 June – 9 July, 2010, Hagenberg, Austria (Grant from project SCIEnce (Symbolic Computation Infrastructure in Europe) funded by the EU)
  - Summer School Modern Data Mining Technologies / Vasaros mokykla Modernios duomenų gavybos technologijos (all expenses covered by the project "Informatics and Mathematics doctoral studies development (InMaDra)" (no. BPD2004-ESF-2.5.0-03-05/0027)supported by European structural funds)

SKILLS

Computer

Programming: C/C++, C#, Python, Java, Visual Basic
Scientific computing: GNU Octave, Matlab, Mathematica, Maple, Maxima, R, COMSOL Multiphysics
Version control: SVN, Git
Post-processing (visualisation): ParaView, VisIt
Parallel computing: OpenMP, MPI
Libraries and packages for isogeometric analysis: Geometry + Simulation Modules (G+Smo), GeoPDEs

Languages

Lithuanian (native)	Fluent
English	Proficient
German	Basics
Spanish	Basics

PUBLICATIONS

Refereed journal publications

1. J. Martín-Vaquero, S. Sajavičius. The two-level finite difference schemes for the heat equation with nonlocal initial condition. *Applied Mathematics and Computation*, **342**, pp. 166–177, 2019.DOI: 10.1016/j.amc.2018.09.025 [Impact Factor: 2.300 (2017), 3.092 (2018), 3.472 (2019)]
   Times Cited (without self-citations): 2
2. S. Sajavičius. Radial basis function collocation method for an elliptic problem with nonlocal multipoint boundary condition. *Engineering Analysis with Boundary Elements*, **67**, pp. 164–172, 2016. ISSN 0955-7997, DOI: 10.1016/j.enganabound.2016.03.010 [Impact Factor: 1.862 (2015), 1.721 (2016), 2.138 (2017)]
   Times Cited (without self-citations): 2

3. S. Sajavičius. Radial basis function method for a multidimensional linear elliptic equation with nonlocal boundary conditions. *Computers and Mathematics with Applications*, **67**(7), pp. 1407–1420,2014. ISSN 0898-1221, DOI: 10.1016/j.camwa.2014.01.014 [Impact Factor: 2.069 (2012), 1.996 (2013), 1.697 (2014), 1.398 (2015), 1.531 (2016)]
   Times Cited (without self-citations): 14
4. S. Sajavičius. Optimization, conditioning and accuracy of radial basis function method for partial differential equations with nonlocal boundary conditions—A case of two-dimensional Poisson equation. *Engineering Analysis with Boundary Elements*, **37**(4), pp. 788–804, 2013. ISSN 0955-7997, DOI: 10.1016/j.enganabound.2013.01.009 [Impact Factor: 1.451 (2011), 1.596 (2012), 1.437 (2013), 1.392 (2014), 1.862 (2015)]
   Times Cited (without self-citations): 9
5. S. Sajavičius. Stability of the weighted splitting finite-difference scheme for a two-dimensional parabolic equation with two nonlocal integral conditions. *Computers and Mathematics with Applications*, **64**(11), pp. 3485–3499, 2012. ISSN 0898-1221, DOI: 10.1016/j.camwa.2012.08.009 [Impact Factor: 1.747 (2011), 2.069 (2012), 1.996 (2013), 1.697 (2014)]
   Times Cited (without self-citations): 9
6. S. Sajavičius. On the eigenvalue problems for differential operators with coupled boundary conditions. *Nonlinear Analysis: Modelling and Control*, **15**(4), pp. 493–500, 2010. ISSN 1392-5113, DOI:10.15388/NA.15.4.14320 [Impact Factor: 0.400 (2010), 0.686 (2011), 0.861 (2012)]
7. S. Sajavičius. On the eigenvalue problems for finite-difference operators with coupled boundary conditions. *Šiauliai Mathematical Seminar*, **5(13)**, pp. 87–100, 2010. ISSN 1822-511X
8. S. Sajavičius, M. Sapagovas. Numerical analysis of the eigenvalue problem for one-dimensional differential operator with nonlocal integral conditions. *Nonlinear Analysis: Modelling and Control*, **14**(1), pp. 115–122, 2009. ISSN 1392-5113, DOI: 10.15388/NA.2009.14.1.14535 [Impact Factor: 0.400 (2010), 0.686 (2011), 0.861 (2012)]
   Times Cited (without self-citations): 5

Book chapter

1. S. Sajavičius, B.Jüttler, J. Špeh. Template mapping using adaptive splines and optimization of the parameterization. In: C. Giannelli and H. Speleers (eds.) *Advanced Methods for Geometric Modeling and Numerical Simulation*, Springer INdAM series, Vol. 35, pp. 217–238, Springer, Cham, 2019. DOI: 10.1007/978-3-030-27331-6_9

Publications in refereed conference proceedings

1. S. Sajavičius. The splitting finite-difference scheme for two-dimensional heat conduction equation with four nonlocal integral conditions. In: J. Eberhardsteiner, H. J. Böhm and F. G. Rammerstorfer (eds.), *CD-ROM Proceedings of the 6th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012)*, Vienna, Austria, September 10–14, 2012, CD-ROM, Paper ID 1081, 12 p., Vienna, Austria, 2012. ISBN 978-3-9502481-9-7
2. S. Sajavičius. On the stability of fully-explicit finite-difference scheme for two-dimensional parabolic equation with nonlocal conditions. In: B. Murgante, O. Gervasi, A. Iglesias, D. Taniar, B. O. Apduhan (eds.), *Computational Science and Its Applications – ICCSA 2011, International Conference, Santander, Spain, June 20–23, 2011, Proceedings, Part IV. Lecture Notes in Computer Science*, **6785**, pp. 1–10, Springer-Verlag Berlin Heidelberg, 2011. ISSN 0302-9743/e-ISSN 1611-3349, ISBN 978-3-642-21897-2/e-ISBN 978-3-642-21898-9, DOI: 10.1007/978-3-642-21898-9_1
3. S. Sajavičius. On the stability of locally one-dimensional method for two-dimensional parabolic equation with nonlocal integral conditions. In: J. C. F. Pereira, A. Sequeira, J. M. C. Pereira (eds.), *Proceedings of the V European Conference on Computational Fluid Dynamics (ECCOMAS CFD 2010)*, 14–17 June 2010, Lisbon, Portugal, CD-ROM, 11 p., Lisbon, Portugal, 2010. ISBN 978-989-96778-1-4
4. S. Sajavičius. On the stability of alternating direction method for two-dimensional parabolic equation with nonlocal integral conditions. In: V. Kleiza, S. Rutkauskas, A. Štikonas (eds.), *Proceedings of International Conference Differential Equations and Their Applications (DETA'2009)*, Panevėžys, Lithuania, pp. 42–48, Technologija, Kaunas, Lithuania, 2009. ISBN 978-9955-25-747-9

Technical reports

1. S. Sajavičius, B.Jüttler and J. Špeh. Template mapping using adaptive splines and optimization of the parameterization. *NFN Technical Report No. 78*, 2019
2. Optimization framework integrating the volumetric approaches, adaptive refinement procedures and the new shape deformation techniques. *MOTOR Project D5.2*, 2018
3. Report on shape deformation techniques based on volumetric approaches. *MOTOR Project D2.4*, 2018
4. Report and prototype software for geometry-aware block structuring and volume parameterization. *MOTOR Project D2.3*, 2017
5. Report and prototype software for multivariate adaptive spline technology. *MOTOR Project D2.1*, 2016

Extended abstracts

1. S. Sajavičius. The splitting finite-difference schemes for two-dimensional parabolic equation with nonlocal weighted integral conditions. In: S. Repin, T. Tiihonen, T. Tuovinen (eds.), *Proceedings of ECCOMAS Thematic Conference on Computational Analysis and Optimization (ECCOMAS CAO 2011)*, 9–11 June 2011, Jyväskylä, Finland, pp. 81–84, 2011. ISSN 1456-4351 / ISBN 978-951-39-4331-8
2. S. Sajavičius. The splitting finite-difference schemes for two-dimensional parabolic equation with nonlocal conditions. In: A. Eriksson and G. Tibert (eds.), *Proceedings of NSCM23: the 23rd Nordic Seminar on Computational Mechanics / Technical report 2010:07*, pp. 345–348, Stockholm, Sweden,2010. ISSN 0348-467X
3. S. Sajavičius. The stability of finite-difference scheme for two-dimensional parabolic equation with nonlocal integral conditions. In: L. Damkilde,L. Andersen, A. S. Kristensen and E. Lund (Eds.), *DCE Technical Memorandum No. 11 / Proceedings of the Twenty Second Nordic Seminar on Computational Mechanics*, pp. 87–90, Aalborg, Denmark, 2009. ISSN 1901-7278