CURRICULUM VITAE of
Ivan Gudoshnikov, PhD

PERSONAL INFORMATION:

Born:	in 1989,
E-mail:	gudoshnikov[at]math[dot]cas[dot]cz **Website:** gudoshnikov.com

EXPERIENCE:

Oct 2021 — c.t.	**Postdoctoral Fellow**, Institute of Mathematics of the Czech Academy of Sciences, Czech Republic. Individual project L100192151 funded by the "Programme to support prospective human resources – post Ph.D. candidates" of the Czech Academy of Sciences, also received support from GAČR project 20-14736S.
Dec 2020 — — March 2021	Volonteer Researcher, Arizona State University, USA. Collaboration with Dr. Yang Jiao and his Complex Materials Lab: https://sites.google.com/view/complexmateriallab
Aug 2020 — — Dec 2020	**Postdoctoral Research Scholar**, Arizona State University, USA. Collaboration with Dr. Yang Jiao and his Complex Materials Lab: https://sites.google.com/view/complexmateriallab. Supported by Dr. Jiao's NSF grant CMMI-1916878.

EDUCATION:

2014 – 2020	**PhD in Mathematics**, The University of Texas at Dallas, USA. Advisor: Prof. O. Makarenkov. Teaching Assistantship, Research Assistantship supported by Prof. Makarenkov's NSF grants CMMI-1436856 and CMMI-1916876.
2012 – 2014	PhD student, Mathematics, Voronezh State University, Russia. Supervisor: Prof. M. I. Kamenskii. Teaching assistantship.
2010 – 2012	**MS in Mathematics**, Voronezh State University, Russia. Thesis Supervisor: Prof. M. I. Kamenskii.
2006 – 2010	**BS in Mathematics**, Voronezh State University, Russia. Undergraduate Thesis Supervisor: Prof. M. I. Kamenskii.

PUBLICATIONS:

[1] **Gudoshnikov I.**, Makarenkov O., Rachinskiy D. *Finite-time stability of polyhedral sweeping processes with application to elastoplastic systems.* Accepted to SICON.

[2] **Gudoshnikov I.**, Makarenkov O. *Stabilization of the response of cyclically loaded lattice spring models with plasticity.* ESAIM: COCV 27 (2021) S8. https://doi.org/10.1051/cocv/2020043

[3] **Gudoshnikov I.**, Kamenskii M., Makarenkov O., Voskovskaia N. *One-period stability analysis of polygonal sweeping processes with application to an elastoplastic model.* Math. Model. Nat. Phenom., 15 (2020) 25. https://doi.org/10.1051/mmnp/2019030

[4] **Gudoshnikov I.**, Makarenkov O. *Structurally stable families of periodic solutions in sweeping processes of networks of elastoplastic springs.* Phys. D 406 (2020), 132443. https://doi.org/10.1016/j.physd.2020.132443

[5] Wadippuli Achchige L. N., Makarenkov O., **Gudoshnikov I.** *Global asymptotic stability of non-convex sweeping processes.* Discrete Contin. Dyn. Syst. Ser. B, (2020) 25 (3) : 1129-1139. `https://doi.org/10.3934/dcdsb.2019212`

[6] Kamenskii, M., **Gudoshnikov I.** *On the stability of perturbed semigroups in partially ordered Banach spaces.* J. Math. Sci. (N.Y.) 233 (2018), no. 6, 853–874. `https://doi.org/10.1007/s10958-018-3970-2`

[7] **Gudoshnikov I.**, Kamenskii M., Nistri P. *Exponential stability of positive semigroups in Banach spaces.* J. Math. Anal. Appl. 429 (2015), no. 2, 833–848. `https://doi.org/10.1016/j.jmaa.2015.04.041`

[8] **Gudoshnikov I.** *On the Truchet tiles and coverings.* Proceedings of the Department of Mathematics of Voronezh State University, 11 (2007) 49-68. (in Russian)

RESEARCH INTERESTS:

Nonsmooth Dynamical Systems, Moreau's Sweeping Process, Elastoplasticity, Stability Theory, Graph Theory, Contact Dynamics, Semigroups in Banach spaces, Ordered Banach spaces.

AWARDS AND ADDITIONAL EDUCATION:

- The 2nd Annual Meeting of the SIAM Texas Louisiana Section travel support, 2019

- SIAM Conference on Mathematical Aspects of Materials Science travel award, 2018

- Betty and Gifford Johnson Scholarship, 2017

- SIAM TX-LA travel grant for TAMES 2017

- A scholarship by "Informsvyaz" communications company awarded for winning a contest of projects in programming, 2012, Voronezh, Russia

- Certificate of training in embedded systems software development by DSR and OTSL companies, 2012, Voronezh, Russia

- Participant of XI Winter Diffiety School, 2011, Saint Petersburg, Russia

- Additional qualification "Network engineering and administration of information systems", Voronezh State University, Russia, 2009-2011.