Csaba Nagy

Contact information

School of Mathematics and Statistics

University of Glasgow

University Place, Glasgow G12 8QQ, UK

Employment

2022 – 2024: University of Glasgow

2021 – 2022: Durham University

Postdoctoral Research Associate, mentor: Mark Powell

2020 - 2021: University of Bath

Research Associate (postdoc), mentor: Johannes Nordström

Education

2021: PhD in Mathematics, University of Melbourne Supervisor: Diarmuid Crowley

Thesis: The classification of 8-dimensional E-manifolds

2012: MSc in Mathematics, Eötvös Loránd University Supervisor: András Szűcs 2010: BSc in Mathematics, Eötvös Loránd University Supervisor: András Szűcs

Publications

• Singularities and stable homotopy groups of spheres I. (with A. Szűcs, T. Terpai), J. Singul. 17

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(2018), 1-27.

• Cobordism groups of simple branched coverings, Acta Math. Hungar. 153 (2017), no. 2, 449-

489

Accepted papers

• Turning vector bundles. (with D. Crowley, B. Sims, H. Yang), To appear in Algebr. Geom. Topol. arXiv:2204.08678

 \bullet The smooth classification of 4-dimensional complete intersections. (with D. Crowley), To appear

in Geom. Topol. arXiv:2003.09216

Submitted papers & Preprints

• Sum of embedded submanifolds. arXiv:1705.03836

• Rational homotopy and simply-connected 8-manifolds. (with J. Nordström) arXiv:2105.13660

• Simple homotopy types of even dimensional manifolds. (with J. Nicholson, M. Powell)

arXiv:2312.00322

• Extended surgery theory for simply-connected 4k-manifolds. arXiv:2402.13394

• Inertia groups of 3-connected 8-manifolds. (with D. Crowley) Announcement.

http://www.dcrowley.net/Crowley-Nagy-3c8m-b.pdf

Conference talks

36th British Topology Meeting – Early Career Researchers Conference (Sheffield, September 2023)

Stability in Topology, Arithmetic, and Representation Theory (Purdue University, July 2023)

Algebraic Methods in 4-Manifold Topology (Glasgow, June 2023)

66th Annual Meeting of the AustMS (UNSW Sydney, December 2022)

Topology in Distinct Flavours (Warwick, June 2021)

63rd Annual Meeting of the AustMS (Monash University, December 2019)

Analysis on Manifolds (University of Adelaide, October 2019)

Topology of manifolds: Interactions between high and low dimensions (Melbourne, January 2019)

Manifolds workshop (University of Cambridge, December 2018)

International Conference on Manifolds, Groups and Homotopy (Isle of Skye, June 2018)

61st Annual Meeting of the AustMS (Macquarie University, Sydney, December 2017)

Ecstatic Lectures: Early Career Topology Researchers In Conference (Sheffield, June 2017)

Early Career Stage Topologists AT Imperial College (Imperial College London, June 2016)

OAC-manifolds meeting (University of Oxford, February 2016)

Invited seminars

University of Melbourne, Topology seminar (December 2022)

Durham University, Geometry and Topology Seminar (January 2021)

Comenius University, Bratislava, Seminar of Differential and Algebraic Topology (January 2020)

Monash University, Melbourne, Topology seminar (October 2018)

Rényi Institute, Budapest, Algebraic Geometry and Differential Topology Seminar (January 2018)

University of Aberdeen, Topology seminar (June 2017)

Rényi Institute, Budapest, Algebraic Geometry and Differential Topology Seminar (February 2017)

University of Aberdeen, Topology seminar (April 2015)

Rényi Institute, Budapest, Algebraic Geometry and Differential Topology Seminar (October 2014)

Research University of Melbourne (hosted by Diarmuid Crowley, December 2022)

visits University of Bath (hosted by Johannes Nordström, July 2018)

Conferences Young Topologists Meeting (EPFL, Lausanne, July 2023)

attended Geometry, Topology and Singular Special Holonomy Spaces (Freiburg, June 2022)

British Topology Meeting (Durham, April 2022)

Invariants and Structures in Low-Dimensional Topology (Matrix-MFO, September 2021) Four Manifolds: Confluence of High and Low Dimensions (Fields Institute, Toronto, July 2019)

MSRI Summer School: Representation Stability (MSRI, Berkeley, June-July 2019) Talbot Workshop: Moduli Spaces of Manifolds (McCullough County, TX, April 2019)

Young Topologists Meeting (University of Copenhagen, July 2018)

Topology and geometry 2018 summer school (University of Chicago, June 2018) Future Directions in Representation Theory (University of Sydney, December 2017) Gauge Theory and Higher Geometry (University of Adelaide, November 2017)

Young Topologists Meeting (University of Stockholm, July 2017) Groups, Manifolds and K-Theory (University of Münster, June 2017)

Topology in Australia and South Korea (University of Melbourne, May 2017) Surgery and Geometry Workshop (Banff International Research Station, July 2016)

Summer School on Surgery and the Classification of Manifolds (University of Calgary, July 2016)

Young Topologists Meeting (University of Copenhagen, July 2016)

Developments in Contact and Symplectic Topology (University of Glasgow, June 2016)

Teaching at the University of Glasgow:

Undergraduate course: Topics in Discrete Mathematics (current semester)

SMSTC lecture: Algebraic topology at The University of Melbourne:

Assisted with supervision of MSc student Blake Sims

at the University of Aberdeen:

Tutorials: Analysis II, Combinatorics, Geometry

at Eötvös Loránd University:

Tutorials: Algebraic topology, Introduction to topology, Linear algebra

Refereeing I have refereed for the following journals:

Journal of Topology

Journal of Homotopy and Related Structures

Service I have co-organised the 24th Scottish Topology Seminar (Glasgow, October 2023)

Languages Hungarian (mother tongue)

English (fluent) French (basic)

Awards & Competitions

Greg Hjorth Memorial Prize: for the most outstanding thesis in mathematics (Melbourne, 2023)

Mary Lugton Scholarship (Melbourne, 2020)

Melbourne Research Scholarship (Melbourne, 2017–20)

Rowden White Scholarship (Melbourne, 2017)

Republic Scholarship (Hungarian Ministry of Education, 2009–10, 2011–12) Schweitzer Mathematical Competition: Second Prize (2012), Third Prize (2011) International Mathematics Competition: Second Prize (2011), First Prize (2009, 2010)

International Mathematical Olympiad: Silver Medal (2006, 2007)

Research

Differential topology and algebraic topology: surgery theory and the classification of manifolds;

interests singular maps, in particular branched coverings