

CURRICULUM VITAE

ULRIKE TILLMANN

Date of birth 12.12.1962. Married. Three children. Dual nationality: German & British.

Education and Degrees

1985 B.A. Computer Science B.A. Mathematics, Brandeis University (Wien International Scholar)

1990 Ph.D., Stanford University (Sloan Fellow)

1996 Habilitation, Universität Bonn (DFG Fellow)

Appointments

1990–1992 SERC Research Assistant and JRF Clare Hall, Cambridge

1992–2010 Tutor at Merton College and Lecturer, Oxford

Since 2010 Professor of Mathematics (RSIV), Oxford

2021–2026 Director of the Isaac Newton Institute and NM Rothschild & Sons Professor, Cambridge

2018 Royal Society Vice President (interim)

2020 Chern Visiting Professor, MSRI Berkeley

2021–2023 LMS President

2023–2026 IMU Vice President

Distinctions and Honours

Wien International Scholar, Brandeis 1982-85

Whitehead Prize, London Mathematical Society 2004

Bessel Research Prize, Humboldt Stiftung 2008

Fellow of the Royal Society, FRS 2008

Fellow of the American Mathematical Society, 2012

Member of Leopoldina, the German National Academy, ML 2017

Member of IMU Circle, 2018

Member of the European Academy of Sciences, 2021

Named and Distinguished Lectures, selected

International Congress of Mathematicians, invited lecturer, Beijing 2002

Mary Cartwright Lecturer, London Mathematical Society 2006

Chaire de la Vallée-Poussin, lecture series, UCL Louvain 2006-2007

Emmy Noether Lecturer, Deutsche Mathematiker Vereinigung 2009

AMS Current Events Lecturer, New Orleans 2011

Abel Conference, in honour of John Milnor, IMA Minnesota 2012

CLAM Lecture Series, Latin American Congress of Mathematicians 2016

Tondeur Lectures, UCIU 2017

Pinsky Lectures, Northwestern University 2018

Abel in Jerusalem, Hebrew University 2020

Distinguished Lecturer, Fields Institute 2020

IMU Centennial, Mathematics without Borders, Strasbourg 2021

Gauss Lecture, Deutsche Mathematiker Vereinigung 2022

Forward From the Fields Medal, Toronto 2024

Major Research Grants, selected

EPSRC Advanced Fellowship, 1997–2003

NSF Focused Research Group (Senior Scientist), 2003–2006

EPSRC New Approaches to Data Science (Co-PI), 2.8 million pounds, 2018–2023

EPSRC International Centre to Centre Research Collab. (Co-PI), 1.2 million pounds, 2024–2027

Research Students

27 students completed, including 9 women and ICM 2022 invited speakers Wahl and Randal-Williams

Editorial Boards, selected

Oxford Quarterly Journal of Mathematics, OUP, 2000–2020

Algebraic and Geometric Topology, AGT, MPS, from its foundation, 2000–2020

Journal of Topology, LMS, **founding and managing editor**, 2007 – 2017

Geometry & Topology, MPS, since 2017

Journal of the American Mathematical Society, JAMS, AMS, since 2018

Forum of Mathematics: Pi and Sigma, CUP, since 2019

Foundations of Computational Mathematics, JoFoCM, Springer, 2020– 2022

International Scientific Committees, selected

International Review Committee of Mathematics in Norway (Chair), 2011

Advisory Board, Mathematisches Forschungsinstitut Oberwolfach (Vice-Chair), 2013 – 2020

MPI International Scientific Advisory Board, Max Plack Institute Leipzig, 2017–2023

Fields Institute, Toronto, Scientific Advisory Board 2019–2024, Board of Directors since 2024

ICM Programme Committee: Rio 2018; Section Com. – Topology: Hyderabad 2010, Seoul 2014

IMU Executive Committee, observer Berlin 2019, Vice President 2023–2026

FWF Austrian Science Foundation: Scientific Advisory Board, 2019–2024

DFG German Science Foundation: Leibniz Preis Ausschuss, since 2020

DFG German Science Foundation: Excellence Strategie, Committee of Experts, since 2024

Abel Prize Committee, 2021 – 2023

National Scientific Committees, selected

LMS Council, 2008–2014; as President, 2021–2023

ATI Programme Committee, Alan Turing Institute (inaugural Chair), 2016 – 2017

RS Council, Royal Society, 2017–2020; as Vice-President (interim), 2018

RS Education Committee (Chair), Royal Society, since 2019

Diversity, selected

EMS–EWM Scientific Committee, (inaugural Chair) 2008 – 2012, member until 2020

ICWM Scientific Committee (Chair), first international women’s meeting prior to ICM 2010

EMS–EWM Steering Committee (Chair): summer schools at the Mittag-Leffler Institute 2015– 20

Women in Topology (WIT) group leader; publications in Top. Appl. 2018 and Advances 2017

EAUMP - ICTP Summer School, Kampala, Uganda 2019

Recent visits to the Global South: IMPA 70th Anniversary, Rio 2022; VIASM Annual Meeting, Hanoi 2023; AIMS Siyakhula, 20th Anniversary, Cape Town 2024; ICCM, Shanghai 2025

Publications, selected

[1] *On the homotopy of the stable mapping class group*. Inventiones, (1997), 257–275

[2] *The stable mapping class group and $Q(CP_{+}^{\infty})$* . Inventiones (2001), 509–544 (w. Madsen)

[3] *Divisibility of the stable Miller-Morita-Mumford classes*. JAMS, (2006), 759–77 (w. Galatius, Madsen)

[4] *The homotopy type of the cobordism category*. Acta (2009), 195–239 (w. Galatius, Madsen, Weiss)

[5] *Infinite loop spaces and commutative K -theory*, AGT (2017), 869–893 (w. Adem, Gomez, Lind)

[6] *Infinite loop spaces from operads with homol stab*, Advances (2017) (w. Basterra, Bobkova, Ponto, Yeakel)

[7] *A framework for differential calculus on persist. barcodes*, JoFoCM (2021), 1–61 (w. Leygonie, Oudot)

[8] *Multiparam. pers. homol. landscapes identify immune cell patterns in tumors*, PNAS (2021) (Vipond et al.)

[9] *Homology stability for asymptotic monopole moduli spaces*, Proc. Royal Soc. A (2023), 1–16 (w. Palmer)

[10] *Multiscale topology classifies cells in subcellular transcriptomics*, Nature (2024) (Benjamin et al.)