

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 University

1992-2010: Tutor at Merton College and Lecturer at Oxford University

Since 2010: Professor of Mathematics (RSIV), Oxford University

Since 2021: Director of the Isaac Newton Institute and NM Rothschild & Sons Professor, Cambridge

2018: Vice President (interim), Royal Society

2020: Chern Visiting Professor, MSRI Berkeley

2021–2023: LMS President

Distinctions and Honours

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

Fellow of the Institute of Mathematics and its Applications, FIMA 2015

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

Major Grants

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

Research Students

25 students completed, including ICM 2022 invited speakers Nathalie Wahl and Oscar Randal-Williams

Editorial Boards, selected

Oxford Quarterly Journal of Mathematics, OUP, 2000–2020
Algebraic and Geometric Topology, AGT, MPS, since its foundation, 2000–2020
London Mathematical Society Proceedings/Journal/Bulletin, LMS, 2004–2007
Journal of Topology, LMS, **funding and managing editor**, 2007 – 2017
Ergebnisse der Mathematik und ihrer Grenzgebiete, Springer, since 2015
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, since 2020

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, since 2017
ICM Section Committee – Topology: Hyderabad 2010, Seoul 2014
ICM Programme Committee: Rio 2018
IMU Executive Committee (observer), Berlin 2019
FWF Austrian Science Foundation: Scientific Advisory Board, since 2019
DFG Leibniz Preis Ausschuss, Deutsche Forschungsgemeinschaft, since 2020
Abel Prize Committee, 2021 – 2023

National Scientific Committees, selected

LMS Publications Committee, 2007–2012
LMS Council, 2008–2014; as President, 2021–2023
ATI Programme Committee, Alan Turing Institute (inaugural Chair), 2016 – 2017
RS Council, Royal Society, 2017 – 2020
RS Vice-President of the Royal Society (interim), 2018
RS Education Committee (Chair), since 2019

Women in Mathematics and Outreach, 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 2016
EAUMP - ICTP Summer School, Course on *Topological Data Analysis*, Kampala, Uganda 2019

Publications, selected

[1] *On the homotopy of the stable mapping class group*. *Inventiones*, **130** (1997), 257–275
[2] *S-structures for k -linear categories and the definition of a modular functor*. *JLMS*, **58** (1998), 208–228
[3] *Higher genus surface operad detects infinite loop spaces*. *Math. Ann.*, **317** (2000), 613–628
[4] *The stable mapping class group and $Q(CP_+^\infty)$* . *Inventiones* **145** (2001), 509–544 (w. Madsen)
[5] *Divisibility of the stable Miller-Morita-Mumford classes*. *JAMS*, **19** (2006), 759–77 (w. Galatius, Madsen)
[6] *Braids, mapping class groups, and categorical delooping*. *Math. Ann.*, **339** (2007), 377–393 (w. Song)
[7] *The homotopy type of the cobordism category*. *Acta* **202** (2009), 195–239 (w. Galatius, Madsen, Weiss)
[8] *Infinite loop spaces and commutative K -theory*, *AGT* **17** (2017), 869–893 (w. Adem, Gomez, Lind)
[9] *Infinite loop spaces from operads with homology stability*, *Advances* **321** (2017), 391–430
(w. Basterra, Bobkova, Ponto, Yeakel)
[10] *A Framework for Differential Calculus on Persistence Barcodes*, *JoFoCM* (2021), 1–61
(w. Leygonie, Oudot) online first