
CURRICULUM VITAE

Søren Galatius

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PERSONAL DATA

Born August 1, 1976 in Randers, Denmark. Danish citizen.

EDUCATION

PhD in Mathematics, Aarhus University, 2004

Cand. Scient. (MSc), Aarhus University, 2002

EMPLOYMENT

Visiting Professor, Columbia University 2023–24

Professor, Copenhagen University (4/16 - present)

Professor, Stanford University (9/11 - 9/2018)

Associate Professor, Stanford University (9/08 - 8/11)

Assistant Professor, Stanford University (9/06 - 8/08)

Szegő Assistant Professor, Stanford University (9/04 - 8/06)

SELECTED INVITED LECTURES

Moursund Lectures, U Oregon, 2023

Distinguished Lecture, Swedish Mathematical Society 2022

William J. Spencer Lecture, Kansas State, 2017

Ordway Lectures, Minnesota, 2016

ICM Invited speaker, Korea, 2014

Adem Lectures, Mexico City, Mexico, 2013

European Congress of Mathematics, Amsterdam, 7/08

Plenary lecture, AMS regional, Baton Rouge, 3/08

AWARDS AND HONORS

Clay Research Award (with Randal-Williams) 2022

DNRF Center “GeoTop”, co-PI 2020–

Eliteforsk Prize 2017

ERC Consolidator Grant 2016–2021

NSF grants DMS-0505740 (2005–2008), DMS-0805843 (2008–2011), DMS-1105058 (2011–2014), DMS-1405001 (2014–2017)

NSF conference grants DMS-1430456 (2014), DMS-1619698 (2016)

Royal Danish Academy of Sciences, elected foreign member (2013)

Featured in AMS–Current Events Bulletin, New Orleans 2011
Royal Danish Academy of Sciences “silver medal” (2010)
Clay Research Fellowship 2007–2010

OTHER ACADEMIC FUNCTIONS

Coorganizer, *Ib Fest*, Copenhagen, Denmark, 2022
Coorganizer, *Arbeitsgemeinschaft*, Oberwolfach, 2003 and 2021
Mentor, *STAGOSAUR Summer School 2020*, Online, 2020
Coorganizer, *Topologie*, Oberwolfach, Germany, 2020, 2022
Mentor, *MIT Talbot Workshop Mentor*, Texas, 2019
Coorganizer, *Patterns in Cohomology of Moduli Spaces*, Oxford, 2019
Coorganizer, *Moduli and Traces*, Copenhagen, Denmark, 2017
Coorganizer, *Topology of Manifolds*, Lisbon, Portugal, 2016
Coorganizer, *Hausdorff Trimester*, Bonn, Germany, 2015
Coorganizer, *Algebraic Topology: Applications and New Directions*, Stanford 7/12
Principal scientific organizer, *WCATSS Summer School*, Oregon 2010.
Coorganizer, *Homotopy of Moduli Spaces*, Oberwolfach, 10/03
Coorganizer, *Topology of Moduli Spaces*, Stanford, 1/07
Coorganizer, *Loops, Strings and Moduli Spaces*, Tianjin, China, 8/09
Coorganizer, Stanford topology seminar
Editor of *International Mathematical Research Notices*, 2016–2019
Editor of *Transactions of the AMS*, 2013–2016
Editor of *Memoirs of the AMS*, 2013–2016
Editor for *Algebraic and Geometric Topology*, 2010–2019
Director of Stanford *Math Research Center*, 2015–2018

PHD STUDENTS

4 current students (advisor/coadvisor)
Arpon Raksit, Stanford, 2021
Calista Bernard, Stanford, 2021
Mikala Ørsnes Jansen, Copenhagen, 2021
Jens Reinhold, Stanford, 2019
Gergely Szűcs, Stanford, 2018
Alexander Kupers, Stanford, 2016
Sam Nariman, Stanford, 2015
Ilya Grigoriev, Stanford, 2013
Nisan Stiennon, Stanford, 2013
Man Chuen Cheng, Stanford, 2011

PUBLICATIONS

1. S. Galatius, O. Randal-Williams: *Algebraic independence of topological Pontryagin classes*. J. Reine Angew. Math. **802** (2023), 287–305.
2. M. Chan, C. Faber, S. Galatius, S. Payne: *The S_n -equivariant top weight Euler characteristic of $\mathcal{M}_{g,n}$* , accepted in Amer. Math. J. Preprint, arXiv:1904.06367.
3. T. Feng, S. Galatius, A. Venkatesh: *The Galois action on symplectic K-theory*. Invent. Math. **230** (2022), 225–319.
4. S. Galatius, G. Szűcs: *The equivariant cobordism category*. J. Topol. **14** (2021), no. 1, 215–257.
5. M. Chan, S. Galatius, S. Payne: *Topology of moduli spaces of tropical curves with marked points*. In *Facets of Algebraic Geometry: Volume in Honour of William Fulton's 80th Birthday*, eds. P. Aluffi, D. Anderson, M. Hering, M. Mustata, S. Payne.
6. M. Chan, S. Galatius, S. Payne: *Tropical curves, graph homology, and top weight cohomology of \mathcal{M}_g* . J. Amer. Math. Soc. **34** (2021), 215–257.
7. S. Galatius: *Lectures on invertible field theories*, exercises and solutions joint with A. Debray and M. Palmer. Chapter in *Quantum Field Theory and Manifold Invariants*, eds. D. Freed, U. Tillmann. IAS/Park City Mathematics Series **28** (2021).
8. S. Galatius, A. Kupers, O. Randal-Williams: *E_2 -cells and mapping class groups*. Publ. Math. Inst. Hautes Études Sci. **130** (2019), 1–61.
9. S. Galatius, O. Randal-Williams: *Operations on stable moduli spaces*. Research in the Mathematical Sciences, **7** (2020), E9.
10. S. Galatius, O. Randal-Williams: *Moduli spaces of manifolds: a user's guide*, chapter in *Handbook of Homotopy Theory*, ed. H. Miller, CRC Press, 2020.
11. S. Galatius, A. Venkatesh: *Derived deformation rings*. Adv. Math. **327** (2018), 470–623.
12. S. Galatius, O. Randal-Williams: *Homological stability for moduli spaces of high dimensional manifolds I*. J. Amer. Math. Soc. **31** (2018), no. 1, 215–264.
13. S. Galatius, O. Randal-Williams: *Homological stability for moduli spaces of high dimensional manifolds II*. Ann. of Math. **186** (2017), no. 1, 127–204.
14. S. Galatius, I. Grigoriev, O. Randal-Williams: *Tautological rings for high dimensional manifolds*. Compositio Math. **153**, no. 4 (2017), 851–866.
15. S. Galatius, O. Randal-Williams: *Abelian quotients of mapping class groups of highly connected manifolds*. Math. Ann., **365** (2016), no. 1–2, 857–879.

16. S. Galatius: *Moduli spaces of manifolds*, in *Proceedings of the International Congress of Mathematicians*, Vol. II, 1197–1217, Kyung Moon Sa, Seoul, 2014.
17. S. Galatius, O. Randal-Williams: *Detecting and realising characteristic classes of manifold bundles*, in *Algebraic Topology: Applications and New Directions*, eds. S. Galatius, D. P. Sinha, U. Tillmann 99–110, Contemp. Math., **620**, Amer. Math. Soc., Providence, RI, 2014.
18. S. Galatius, O. Randal-Williams: *Stable moduli spaces of high dimensional manifolds*. Acta Math. **212** (2014), no. 2, 257–377.
19. S. Galatius: *Lectures on the Madsen–Weiss Theorem*, in *Moduli Spaces of Riemann Surfaces*, eds. B. Farb, R. Hain, E. Looijenga. IAS/Park City Mathematics Series **20** (2013).
20. S. Galatius, Ya. Eliashberg, N. Mishachev: *Madsen–Weiss for geometrically minded topologists*. Geom. Topol. **15** (2011), no. 1, 411–472.
21. S. Galatius: *Stable homology of automorphism groups of free groups*. Ann. of Math. **173** (2011), no. 2, 705–768.
22. S. Galatius, O. Randal-Williams: *Monoids of moduli spaces of manifolds*. Geom. Topol. **14** (2010), no. 3, 1243–1302.
23. R. Cohen, S. Galatius, N. Kitchloo: *Universal moduli spaces of surfaces with flat connections and cobordism theory*. Adv. Math. **221** (2009), no. 4, 1227–1246.
24. S. Galatius, I. Madsen, U. Tillmann, M. Weiss: *The homotopy type of the cobordism category*. Acta Math. **202** (2009), no. 2, 195–239.
25. S. Galatius: *Secondary characteristic classes of surface bundles*. Algebraic & Geometric Topology **9** (2009) 293–303
26. S. Galatius, I. Madsen, U. Tillmann: *Divisibility of the stable Miller–Morita–Mumford classes*, J. Amer. Math. Soc. **19** (2006), no. 4, 759–779.
27. S. Galatius: *Mod 2 homology of the stable spin mapping class group*, Math. Ann. **334** (2006), 439 - 455.
28. S. Galatius: *Mod p homology of the stable mapping class group*, Topology **43** (2004), 1105–1132.

PREPRINTS

1. S. Galatius, O. Randal-Williams: *The Alexander trick for homology spheres*. arXiv:2308.15607.
2. S. Galatius, A. Kupers, O. Randal-Williams: *E_∞ -cells and general linear groups of infinite fields*. arXiv:2005.05620.
3. S. Galatius, A. Kupers, O. Randal-Williams: *E_∞ -cells and general linear groups of finite fields*. arXiv:1810.11931.
4. S. Galatius, A. Kupers, O. Randal-Williams: *Cellular E_k -algebras*. arXiv:1805.07184.