Yu Zhang

Personal Information

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Employment

Sep 2020 - present Nankai University Postdoctoral Researcher, Collaborating Advisor: Xiangjun Wang

Education

2014 - 2020 The Ohio State University Columbus, Ohio, USA

Ph.D. in Mathematics, Dissertation Advisor: John E. Harper

2010 – 2014 Peking University Beijing, China

B.S. in Mathematics, Dissertation Advisor: Huijun Fan

Publications and preprints

 \circ On the secondary differential of the Adams spectral sequence on the third line for p>3

(joint with X. Wang and Y. Wang), In preparation

 Homotopy pro-nilpotent structured ring spectra and topological Quillen localization

Preprint available

- The p-local cohomology of BPU_n in dimensions less than 2p+5 (joint with X. Gu, Z. Zhang and L. Zhong), Submitted
- Topological Quillen localization of structured ring spectra (joint with J. E. Harper), Tbilisi Mathematical Journal 12(3):69–91, 2019

Grants received

2021 - 2022 Postdoctoral International Exchange Program

Invited talks

- TBD **Chern Institute of Mathematics**, Higher Structures in Geometry and Physics, "TBD"
- TBD **Academy of Mathematics and Systems Science**, National Conference on Algebraic and Geometric Topology, "TBD"
- Jul 25, 2021 **Shanghai Center for Mathematical Sciences**, IWoAT 2021 Junior Researcher Forum, "Some spectral sequence computations towards stable homotopy groups of spheres at odd primes"

- Jul 17, 2021 **Northeast Normal University**, National Conference for Young Topologists, "Some spectral sequence computations towards stable homotopy groups of spheres at odd primes"
- Dec 16, 2020 **Vietnam National University**, The 8th East Asian Conference on Algebraic Topology (online), "Koszul duality and TQ-homological Whitehead theorem of structured ring spectra"
- Nov 4, 2020 **University of Regina**, Topology Seminar (online), "Koszul duality and TQ-homological Whitehead theorem of structured ring spectra"
- Nov 21, 2019 **Binghamton University**, Geometry and Topology Seminar, "Topological Quillen localization of structured ring spectra"
- Nov 19, 2019 **The University of Chicago**, Algebraic Topology Seminar, "Topological Quillen localization of structured ring spectra"
- Nov 1, 2019 **Penn State Altoona**, Topology Seminar, "Topological Quillen localization of structured ring spectra"
- Oct 30, 2019 **Indiana University Bloomington**, Topology Seminar, "Topological Quillen localization of structured ring spectra"
- Oct 29, 2019 **University of Illinois at Urbana-Champaign**, Topology Seminar, "Topological Quillen localization of structured ring spectra"
- Jul 29, 2019 **Norwegian University of Science and Technology**, Equivariant Topology and Derived Algebra conference, "Topological Quillen completion and localization of structured ring spectra"
- Mar 30, 2019 **University of Illinois at Urbana-Champaign**, Graduate Student Topology and Geometry Conference, "An easy proof of the homological Whitehead theorem for nilpotent spaces"
- Sep 27, 2018 **The Ohio State University**, Homotopy Theory Seminar, "Localization of structured ring spectra with respect to TQ homology"
- Jul 10, 2018 **University of Copenhagen**, Young Topologists Meeting, "Bousfield localization of structured ring spectra"

Conference participation

- TBD Higher Structures in Geometry and Physics, at Chern Institute of Mathematics
- TBD **National Conference on Algebraic and Geometric Topology**, at Academy of Mathematics and Systems Science
- Jul 2021 **IWoAT 2021 Junior Researcher Forum (online)**, organized by Shanghai Center for Mathematical Sciences
- Jul 2021 **Summer School on Equivariant Homotopy Theory**, at Shanghai Center for Mathematical Sciences
- Jul 2021 National Conference for Young Topologists, at Northeast Normal University
- Dec 2020 The 8th East Asian Conference on Algebraic Topology (online), organized jointly by Vietnam National University and Vietnam Institute for Advanced Study in Mathematics

Aug 2020	The First Joint Workshop on Topology and Data Science, at Chongqing University of Technology
May 2020	Midwest Topology Seminar (online), organized by Wayne State University
Oct 2019	Mayday 2019, at The University of Chicago
Sep 2019	AMS Fall Central Sectional Meeting, at University of Wisconsin-Madison
Aug 2019	International Workshop on Algebraic Topology , at Shanghai Center for Mathematical Sciences
Aug 2019	Summer School on Equivariant Homotopy Theory , at Shanghai Center for Mathematical Sciences
Jul 2019	Equivariant Topology & Derived Algebra , at Norwegian University of Science and Technology
Jul 2019	Young Topologists Meeting, at École polytechnique fédérale de Lausanne
May 2019	Midwest Topology Seminar, at Michigan State University
Apr 2019	Shanks Workshop on Homotopy Theory, at Vanderbilt University
Mar 2019	Graduate Student Topology and Geometry Conference , at University of Illinois at Urbana-Champaign
Mar 2019	Workshop on Functor Calculus, at The Ohio State University
Sep 2018	Midwest Topology Seminar, at University of Kentucky
Jul 2018	Young Topologists Meeting, at University of Copenhagen
Apr 2018	Midwest Topology Seminar, at Indiana University Bloomington
Mar 2018	AMS Special Session on Homotopy Theory, at The Ohio State University
Mar 2018	Midwest Topology Seminar, at Northwestern University
Nov 2017	Midwest Topology Seminar, at Wayne State University
Jul 2017	Homotopy Theory: Tools and Applications , at University of Illinois at Urbana-Champaign
May 2017	The MIT Talbot Workshop: Obstruction theory for structured ring spectra, at Gooding Talbot house,
Mar 2017	Shanks Workshop on Homotopy Theory, at Vanderbilt University
Feb 2017	Conference for Young researchers in homotopy theory and categorical structures, at Max Planck Institute for Mathematics
	Teaching Experience

	As lecturer in Nankai University
Autumn 2021	Mathematical Topics for Liberal Arts Students
	As teaching associate in The Ohio State University
Autumn 2018	MATH 2177: Mathematical Topics for Engineers
Autumn 2017	MATH 1172: Engineering Mathematics A
Autumn 2016	MATH 1172: Engineering Mathematics A

Spring 2016 MATH 1152: Calculus II

Languages

English: fluent (speaking, reading, writing)

French: basic (reading)

Mandarin: native language