

## Zhen Huan

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RESEARCH INTERESTS	Algebraic topology, algebraic geometry and mathematical physics.	
POSITION	<b>Sun Yat-sen University</b> , Guangzhou, China Research Associate, August 2017-present	
VISITING POSITION	<b>Universität Duisburg-Essen</b> , Essen, Germany Research Assistant, April 2018-July 2018. Supervisor: Marc N. Levine.	
EDUCATION	<b>University of Illinois at Urbana-Champaign</b> Ph.D. in Mathematics, May 2017 <sup>1</sup> <ul style="list-style-type: none"><li>• Dissertation Defense Date: May 5th 2016</li><li>• Dissertation Title: Quasi-Elliptic Cohomology</li><li>• Advisor: Charles Rezk</li></ul> <b>Indiana University Bloomington</b> M.A. in Mathematics, October 2009 <sup>2</sup>  <b>Peking University</b> B.A. in Mathematics, May 2006 <ul style="list-style-type: none"><li>• Thesis Title: Morse Theory and Bott Periodicity</li><li>• Advisor: Houhong Fan</li></ul>	
PUBLICATION	<ul style="list-style-type: none"><li>• Zhen Huan, <i>Quasi-Elliptic Cohomology and its Power Operations</i>, J. Homotopy Relat. Struct. (2018). <a href="https://doi.org/10.1007/s40062-018-0201-y">https://doi.org/10.1007/s40062-018-0201-y</a>.</li><li>• Zhen Huan, <i>Quasi-elliptic cohomology</i>, Thesis (Ph.D.)–University of Illinois at Urbana-Champaign. 2017. 290 pp. <a href="http://hdl.handle.net/2142/97268">http://hdl.handle.net/2142/97268</a>.</li></ul>	
PREPRINT	<ul style="list-style-type: none"><li>• Zhen Huan, <i>Quasi-elliptic cohomology and its Spectra</i>, available at arXiv:1703.06562. Submitted for publication.</li><li>• Zhen Huan, <i>Quasi-Elliptic Cohomology I.</i> Submitted for publication.</li><li>• Zhen Huan, <i>Universal Finite Subgroup of Tate Curve</i>, available at arXiv:1708.08637.</li></ul>	
WORK IN PROGRESS	<ul style="list-style-type: none"><li>• Zhen Huan and Nathaniel Stapleton, <i>Level Structures, Loop Spaces, and Morava E-theory</i>. In Preparation.</li><li>• Zhen Huan, <i>Almost Global Homotopy Theory</i>. In Preparation.</li></ul>	

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<sup>1</sup>My PhD thesis is 290 pages long. After my defense, I revised the paper for one year to make it more readable and classy under Charles Rezk and Matthew Ando's advice.

<sup>2</sup>During the phase of doctoral research, my research interest switched to algebraic topology and I transferred to UIUC in 2010 whose algebraic topology group was much larger.

SELECTED TALKS	<ul style="list-style-type: none"> <li>• AMS-CMS Special Session on Algebraic and Geometric Topology, Joint International Meeting, Fudan University, <i>Quasi-elliptic cohomology</i>, June 11-14, 2018.</li> <li>• Chinese Academy of Sciences Topology Seminar, <i>Quasi-elliptic cohomology</i>, March 29, 2018.</li> <li>• Peking University Geometry and Topology Seminar, <i>Quasi-elliptic cohomology</i>, November 30, 2017.</li> <li>• Southern University of Science and Technology Topology Seminar, <i>Quasi-elliptic cohomology</i>, November 14, 2017.</li> <li>• Poster Session, Schubert Calculus International Festival, <i>Quasi-elliptic cohomology</i>, November 9, 2017.</li> <li>• AMS Special Session on Homotopy Theory, <i>Quasi-elliptic cohomology</i>, November 5, 2017.</li> <li>• Nankai University Algebraic Topology Seminar, <i>Quasi-elliptic cohomology</i>, October 10, 2017.</li> <li>• Parallel Session, Conference "Homotopy theory: tools and applications", <i>Quasi-elliptic cohomology</i>, July 17, 2017.</li> <li>• Informal Session, Conference on invertible objects and duality in derived algebraic geometry and homotopy theory, the University of Regensburg, Germany, <i>Quasi-elliptic cohomology</i>, April 3, 2017.</li> <li>• AMS Special Session on Homotopy Theory, <i>Quasi-elliptic cohomology</i>, April 1, 2017.</li> <li>• AMS Special Session on Topology and Arithmetic, <i>Quasi-elliptic cohomology</i>, October 30, 2016.</li> <li>• University of Chicago Algebraic Topology Seminar, <i>Quasi-elliptic cohomology</i>, November 25 2014.</li> <li>• Northwestern University Algebraic Topology Seminar, <i>Quasi-elliptic cohomology</i>, November 24 2014.</li> </ul>
TEACHING EXPERIENCE	<p><b>University of Illinois at Urbana-Champaign</b></p> <p>Main instructor of</p> <ul style="list-style-type: none"> <li>• NetMath MATH 231-Calculus II, Summer 2016.</li> <li>• MATH 124-Finite Mathematics, Spring 2016.</li> <li>• MATH 124-Finite Mathematics, Fall 2015.</li> <li>• MATH 124-Finite Mathematics, Spring 2015.</li> <li>• MATH 119-Ideas in Geometry, Fall 2013.</li> </ul> <p>Led discussion sessions for</p> <ul style="list-style-type: none"> <li>• MATH 221-Calculus I, Fall 2016.</li> <li>• MATH 231-Calculus II, Fall 2012.</li> <li>• MATH 234-Calculus for Business I, Spring 2012.</li> <li>• MATH 231-Calculus II, Fall 2011.</li> </ul>
FELLOWSHIP AND AWARDS	<ul style="list-style-type: none"> <li>• James P. Williams Memorial Award in recognition of outstanding scholastic achievement in the first year of graduate studies, from Department of Mathematics, Indiana University, Bloomington, 2007.</li> </ul>
SERVICE	<ul style="list-style-type: none"> <li>• Co-organizer of the conference "International Workshop on Algebraic Topology" at Southern University of Science and Technology, June 6-9, 2018.</li> </ul>
REFERENCES	<p><i>Doctoral Supervisor</i></p> <p><b>Charles Rezk</b>, University of Illinois at Urbana-Champaign, <a href="mailto:rezk@math.uiuc.edu">rezk@math.uiuc.edu</a> 1(217) 265-6309.</p>

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