

# Yi Huang

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Nationality: Australian  
Date of Birth: December 17, 1986

## Education

Ph.D. in Mathematics, The University of Melbourne, December 17, 2014.

Thesis title: *Moduli Spaces of Surfaces*.

Committee: Paul Norbury (supervisor), Craig Westerland, and Nora Ganter.

Honours in Pure Mathematics, March 14, 2009.

Thesis title: *Moduli Spaces and Weil-Petersson Volumes*.

## Areas of Interest

McShane identities, Moduli space theory, Teichmüller theory, hyperbolic and Riemann surface theory, hyperbolic 3-manifolds, discrete Morse theory, persistent homology and fractal geometry.

## Publication List and Preprints

1. *A McShane-type identity for closed surfaces*. Preprint: arXiv:1203.3860 (2012). Accepted without revision for publication in the Nagoya Mathematical Journal.
2. Joint with Paul Norbury, *Simple geodesics and Markoff quads*. Preprint: arXiv:1312.7089 (2013).

## Notable Conferences and Seminars

The 8th Australia New Zealand Mathematics Convention (speaker), The University of Melbourne, December 11, 2014.

Pure Seminar (invited speaker), Monash University, September 15, 2014.

Low Dimension Topology Seminar (invited speaker), Osaka University, July 22, 2014.

N-KOOK Seminar (invited speaker), Osaka City University Cultural Exchange Center, April 5, 2014.

The Second Pacific Rim Mathematical Association Congress, Shanghai Jiao Tong University (speaker), Shanghai Jiao Tong University, June 24–28, 2013.

Australian Mathematical Sciences Institute Summer School 2013 (invited speaker), The University of Melbourne, January 7–February 1, 2013.

The Australian and New Zealand Association of Mathematical Physics Inaugural Meeting 2012 (student speaker), Cumberland Lorne Resort, December 3–5, 2012.

The 56th Annual Australian Mathematical Society Meeting (student speaker–honourable mention), The University of Ballarat, September 24–27, 2012.

Geometry and Arithmetic Around Teichmüller Theory (invited speaker), Galatasaray University, November 15–19, 2011.

Park City Mathematics Institute Summer School 2011 (theme: Moduli Spaces of Riemann Surfaces), PCMI/IAS, Utah. July 3–23, 2011.

Geometry, Topology and Dynamics of Character Varieties, The National University of Singapore, July 1– August 14, 2010.

## Awards and Other Activities

AK Head Mathematical Scientists Travelling Scholarship: 2014.

Australian Mathematical Society Lift-off Travelling Fellowship: 2014.

Bernhard Neumann Prize (honourable mention): 2012.

Australian Postgraduate Award: 2009.

Summer Vacation Scholarship, The University of Melbourne: 2007, 2008.

Student seminar organizer for the Mirror Symmetry reading group: 2013–2014.

Student seminar organizer for the Weil Conjectures reading group: 2012.

Melbourne University Mathematics and Statistics society (MUMS) President, 2008–2009.

MUMS Education Officer, 2007–2008.

## Teaching

Departmental Tutor for: Complex Analysis (2014), Real Analysis (2014), Accelerated Mathematics 1 (2009, 2010, 2012 and 2013), Group Theory and Linear Algebra (2009), Calculus 2 (2008).

Replacement Tutor for: Geometry (2013), (Masters) Complex Analysis (2013).

## Academic References

Associate Prof. Paul Norbury (supervisor)  
The University of Melbourne  
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Prof. Greg McShane  
University of Grenoble (Institut Fourier)  
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Prof. Athanase Papadopoulos  
University of Strasbourg (IRMA)  
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Prof. Hyam Rubinstein  
The University of Melbourne  
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