

# NORMAN DO CURRICULUM VITAE

## PERSONAL INFORMATION

Name	Norman Nam Van Do
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Date of birth	10 March 1980
Citizenship	Australian

## EMPLOYMENT AND EDUCATION

Lecturer	School of Mathematical Sciences, Monash University (2012–present)
Postdoctorate	ARC Australian Postdoctoral Fellowship, The University of Melbourne (2010–2012)
Postdoctorate	CRM–ISM Postdoctoral Fellowship, McGill University (2009–2010)
Postgraduate	PhD in Mathematics, The University of Melbourne (2010)
Undergraduate	BSc(Hons)/BE(Hons), The University of Melbourne (2002)

## RESEARCH

### PUBLICATIONS

#### Preprints

*Orbifold Hurwitz numbers and Eynard–Orantin invariants* (Joint with O. Leigh and P. Norbury)  
[arXiv:1212.6850v2](https://arxiv.org/abs/1212.6850v2) [math.AG]

*The asymptotic Weil–Petersson form and intersection theory on  $\overline{\mathcal{M}}_{g,n}$*   
[arXiv:1010.4126v1](https://arxiv.org/abs/1010.4126v1) [math.GT]

#### Papers

*Counting lattice points in compactified moduli spaces of curves* (Joint with P. Norbury)  
*Geometry & Topology*, Volume 15, Issue 4, 2321–2350 (2011)

*Weil–Petersson volumes and cone surfaces* (Joint with P. Norbury)  
*Geometriae Dedicata*, Volume 141, Number 1, 93–107, (August 2009)

*A tourist’s guide to intersection theory on moduli spaces of curves*  
*Gazette of the Australian Mathematical Society*, Volume 35, Number 2, 103–112, (May 2008)

*Bounds on the max and min bisection of random cubic and random 4-regular graphs* (Joint with J. Díaz, M. J. Serna and N. C. Wormald)  
*Theoretical Computer Science*, Volume 307, Issue 3, 531–547, (2003)

*Bisection of random cubic graphs* (Joint with J. Díaz, M. J. Serna and N. C. Wormald)  
*Lecture Notes in Computer Science*, Volume 2483, 114–125, (2002)

#### Book Chapter

*Moduli spaces of hyperbolic surfaces and their Weil–Petersson volumes*  
*Handbook of Moduli*, Volume I, edited by G. Farkas and I. Morrison, 217–258, (2013)  
Advanced Lectures in Mathematics, International Press

#### Thesis

*Intersection theory on moduli spaces of curves via hyperbolic geometry*  
PhD thesis, The University of Melbourne, (2009)

## SELECTED RESEARCH TALKS

*Orbifold Hurwitz numbers and topological recursion*

Algebraic geometry and related fields, Australian National University, Australia (May 2013)

*Orbifold Hurwitz numbers and topological recursion*

School of Mathematics and Statistics, The University of Sydney, Australia (February 2013)

*Spin Hurwitz numbers*

Annual meeting of the AustMS, University of Ballarat, Australia (September 2012)

*The geometry and combinatorics of moduli spaces*

School of Mathematical Sciences colloquium, Monash University, Australia (March 2012)

*The geometry and combinatorics of moduli spaces*

School of Mathematics and Physics, The University of Queensland, Australia (January 2012)

*Counting lattice points in compactified moduli spaces of curves*

Annual meeting of the AustMS, University of Wollongong, Australia (September 2011)

*Counting lattice points in compactified moduli spaces of curves*

Moduli spaces of Riemann surfaces, Park City Mathematics Institute, USA (July 2011)

*Lattice points in moduli spaces of curves*

Annual meeting of the AustMS, University of Queensland, Australia (September 2010)

*Lattice points in moduli spaces of curves*

Connections in geometry and physics, Perimeter Institute for Theoretical Physics, Canada (May 2010)

*Lattice points in moduli spaces of curves*

Workshop on algebraic varieties, Fields Institute, Canada (March 2010)

*A tourist's guide to intersection theory on moduli spaces of curves*

Annual meeting of the AustMS, La Trobe University, Australia (September 2007)

*A new path to Witten's conjecture via hyperbolic geometry*

Moduli spaces of Riemann surfaces, Centre de Recherches Mathématiques, Canada (June 2007)

## CONFERENCES AND WORKSHOPS

*Moduli spaces and their invariants in mathematical physics*, CRM, Canada (June 2013)

*Algebraic geometry and related fields*, Australian National University (May 2013)

*Topological recursion and quantum algebraic geometry*, Aarhus University, Denmark (January 2013)

*Matrix models to quantum algebraic geometry*, Aarhus University, Denmark (January 2013)

*Australian and New Zealand Association of Mathematical Physics meeting*, Lorne (December 2012)

*Annual meeting of the Australian Mathematical Society*, University of Ballarat (September 2012)

*Early career workshop of the Australian Mathematical Society*, Creswick (September 2012)

*Annual statistical mechanics meeting*, University of Melbourne (December 2011)

*New recursion formulae and integrability for Calabi–Yau spaces*, BIRS, Canada (October 2011)

*Annual meeting of the Australian Mathematical Society*, University of Wollongong (September 2011)

*Early career workshop of the Australian Mathematical Society*, Wollongong (September 2011)

*Moduli spaces of Riemann surfaces*, Park City Mathematics Institute, USA (July 2011)

*Summer school on moduli of curves and Gromov–Witten theory*, Institut Fourier, France (June 2011)

*MathWest workshop 2011*, University of Western Australia (March 2011)

*Combinatorial representation theory and integrable models*, University of Melbourne (January 2011)

*Annual meeting of the Australian Mathematical Society*, University of Queensland (September 2010)

*Early career workshop of the Australian Mathematical Society*, Caloundra (September 2010)

*Geometry, topology and dynamics of character varieties*, NUS, Singapore (July 2010)

*Connections in geometry and physics*, Perimeter Institute for Theoretical Physics, Canada (May 2010)

*Character varieties in geometry and topology of low-dimensional manifolds*, BIRS, Canada (April 2010)

*Workshop on algebraic varieties*, Fields Institute, Canada (March 2010)

*Séminaire universitaire en mathématiques à Montréal*, UQAM, Canada (February 2010)

*Workshop on algebraic varieties*, Fields Institute, Canada (October 2009)

*Workshop on geometry and integrability*, University of Melbourne (February 2008)

*Annual meeting of the Australian Mathematical Society*, La Trobe University (September 2007)

*Short program on moduli spaces of Riemann surfaces and related topics, CRM, Canada (June 2007)*  
*Analytic aspects of low dimensional geometry, Warwick Mathematics Institute, UK (September 2006)*  
*Manifolds at Melbourne, University of Melbourne (January 2006)*  
*Conference on topology, Australian National University (July 2003)*

## **STUDENT SUPERVISION**

Master of Science: Oliver Leigh (2011–2013)

Honours: Christopher Shaw (2014–2015), Alastair Dyer (2014), Sheldon Kendrick (2012–2013)

Vacation Scholarship: Alastair Dyer (2014), Will Stavely (2014), Daniel Esposito (2013), David Manescu (2013), Mahasen Sooriyabandara (2012–2013), Xiaomeng Yao (2012–2013), Dougal Davis (2011–2012), Kit Joyce (2011–2012)

## **TEACHING**

### **UNIVERSITY**

#### **School of Mathematical Sciences, Monash University**

Supervisor for honours reading course on Algebraic Geometry (Semester 2, 2013)

Lecturer for MTH2121/MTH3121 Algebra and Number Theory (Semester 1, 2013)

Tutor for MTH2121/MTH3121 Algebra and Number Theory (Semester 1, 2013)

Supervisor for honours reading course on Algebraic Geometry (Semester 2, 2012)

Supervisor for honours reading course on Random Walks and Electrical Networks (Semester 2, 2012)

#### **Department of Mathematics and Statistics, The University of Melbourne**

Lecturer for MAST 10006 Calculus 2 (Semester 2, 2011 and Semester 1, 2012)

Tutor for MAST 10006 Calculus 2 (Semester 2, 2011 and Semester 1, 2012)

Tutor for 620-121 Mathematics A (Advanced) (2001–2003)

Tutor for 620-142 Mathematics B (2001–2002)

#### **Department of Mathematics and Statistics, McGill University**

Lecturer for MATH 348 Topics in Geometry (Summer 2009 and Summer 2010)

Supervisor for MATH 470 Honours Research Project (Winter 2010)

#### **School of Mathematics and Statistics, University of Western Australia**

Tutor for CP 209 Calculus and Probability (2005)

### **OTHER**

#### **Australian Mathematical Olympiad Committee (AMOC)**

AMOC School of Excellence: Tutor (1998–2000, 2008, 2010–2012), Lecturer (2001–2007)

AMOC IMO Selection School: Lecturer (2001–2008)

AMOC IMO Mentor Program: Mentor (2001–2004)

#### **National Mathematics Summer School**

Tutor (2001–2003), Experienced Group Tutor (2004), Lecturer (2008, 2011–2013)

#### **Mathematics enrichment classes**

Scotch College, Melbourne (1999–2004, 2006–2008), Melbourne Grammar School (2002–2003), Christ Church Grammar School (2005), Scotch College, Perth (2005), Shenton College (2005)

#### **Melbourne University School of Graduate Studies**

Mentor Program for Highly Able Secondary Students (2001, 2003, 2007)

## AWARDS AND FELLOWSHIPS

### RESEARCH GRANTS AND FELLOWSHIPS

ARC Discovery Early Career Researcher Award (2013–2016)  
Monash University Faculty of Science Early Career Researcher grant (2013)  
ARC Discovery Project grant DP1094328 (2010–2013)  
ARC Australian Postdoctoral Fellowship (2010–2013)  
CRM–ISM Postdoctoral Fellowship (2009–2010)

### AWARDS

Victorian Young Tall Poppy Science Award (2013)  
Voted second at The University of Melbourne in the Unijobs Lecturer of the Year (2012)  
Informal Blue Hat Prize awarded for the best non-student talk, Annual meeting of the AustMS (2012)  
B. H. Neumann Prize awarded for the best student talk, Annual meeting of the AustMS (2007)  
Australian Postgraduate Award (2003–2007)  
Vacation Scholarship, Department of Mathematics and Statistics, The University of Melbourne (2002)  
Melbourne Access Scholarship, The University of Melbourne (1998–2001)  
Silver Medal, International Mathematical Olympiad (1997)

## SERVICE AND OTHER ACTIVITIES

### AUSTRALIAN MATHEMATICAL SOCIETY

Organiser of the Early Career Workshop of the Australian Mathematical Society (2013–2015)  
Early Career Representative of the Australian Mathematical Society (2012–2015)  
Author of the *Puzzle Corner* column in the Australian Mathematical Society Gazette (2007–2009)  
Author of the *Mathellaneous* column in the Australian Mathematical Society Gazette (2004–2006)

### AUSTRALIAN MATHEMATICS TRUST

Coauthor of the book *Mathematical Olympiad Lectures* to be published by AMT Publishing in 2013  
Member of the Australian Mathematics Competition Problems Committee (2012–present)  
Member of the Australian Mathematical Olympiad Committee, IMO Team Deputy Leader (2005–2008)  
Member of the AMOC Senior Problems Committee (2003–present)

### PROFESSIONAL SOCIETIES

Member of the Australian Mathematical Society and the American Mathematical Society

### OTHER

Co-organiser of the Monash Maths Academy, an outreach program for talented school students (2013)  
Organiser of the Pure Mathematics Student Meeting, Monash University (2013)  
Organiser of the School of Mathematical Sciences Colloquium series, Monash University (2012–present)  
Organiser of the Volume Conjecture Seminar series, The University of Melbourne (2011)  
Member of the Mathematics of Planet Earth Schools Committee (2013)  
Member of the Melbourne University Mathematics and Statistics committee (1998–2004, 2006–2007)  
Referee for The Australasian Journal of Combinatorics  
Reviewer for Mathematical Reviews  
Presenter of numerous recreational mathematics seminars to various audiences