Sina Hazratpour

Education

Postgraduate Qualifications.

University of Birmingham

O PhD in Computer Science

2015-2018

The University of Western Ontario

M.Sc. in Mathematics

2013-2015

Research Interests.

 Category theory, Topos theory, Higher category theory, Categorical logic, Univalent foundation

Talks, Seminars, and Conferences

- Equivalence of 2-category of stacks and 2-category of internal groupoids in sheaf toposes
 Theory Group Lab Lunch, School of Computer Science, University of Birmingham, UK
 March 2017
- String Diagrams For Distributivity Law Of Monads In Bicategories
 CARGO(category theory reading group) seminars, University of Birmingham, UK
 February 2017
- o Injective Objects In Topoi

CARGO(category theory reading group) seminars, University of Birmingham, UK November 2016

Two Lectures On Geometric Theories And Classifying Topoi

CARGO seminars, University of Birmingham, UK October 2016

Polynomial Functors For Presheaf Topoi And Groupoids

CARGO seminars, University of Birmingham, UK June2015

Polynomial Functors And Opetopes

CARGO seminars, University of Birmingham, UK June2015

Categorical Localization

CARGO seminars, University of Birmingham, UK April 2015

Four Lecture On Introduction To Higher Category Theory

CARGO seminars, University of Birmingham, UK January-February 2015

Categorical Probability And Categorical Entropy

Theory Group Lab Lunch, School of Computer Science, University of Birmingham, UK September 2015

o Distribution Monads, Contexuality, And Cohomology

Theory Seminars, School of Computer Science, University of Birmingham, UK August 2015

o A Gentle Introduction to Quantum Computing For Computer Scientists

CARGO seminars, University of Birmingham, UK July 2015

o Gleason's Theorem And Its Generalization In Toposical Setting

Grad Seminars. Western University. London, Canada April 2015

Homogeneous Manifolds

Geometry and Topology seminars. Western University. London, Canada February 2015

Kochen-Specker Theorem And Its Toposical Formulation

Grad Seminars. Western University. London, Canada November 2014

Quiver Representations And Gabriel's Theorem

Algebra seminars. University of Waterloo, Canada October 2014

o Category Theory In HoTT

HoTT Seminar. Western University. London, Canada October 2014

o On Plenitudious Platonism

Western Philosophy Seminars, Western University, London, Canada September 2014

Modules Of Differentials And Hochschild Formula

Graduate Seminar. Commutative Algebra. Western University. London, Canada March 2014

Groupoids And Van-Kampen Theorem

Class Seminar. Algebraic Topology. Western University. London, Canada November 2013

Recent Participation In:

o YTM 2016

University of Copenhagen, July 4-8, 2016

o PSSL 100

University of Cambridge, 21 - 22 May 2016

 Motives and derived algebraic geometry University of Essen, Germany, May 6-8, 2016

Midlands Graduate School

University of Birmingham, UK, 11 - 15 April, 2016

Higher geometric structures along the Lower Rhine VII
 KU, Leuven, April 7-8, 2016

o PSSL 98

Doorn, the Netherlands

IHES Topos

IHES, France, November 23-27, 2015

150 Years of London Mathematical Society
 University of Birmingham, UK, September 18-20, 2015

 Infinite-Dimensional Representations of Finite-Dimensional Algebras Summer School, University of Manchester, September 8-13, 2015

British Logic Colloquium 2015

University of Cambridge, September 1-4, 2015

Logic Colloquium 2015

University of Helsinki, August 8-13, 2015

Scandinavian Logic Summer School 2015
 University of Helsinki, July 27-August 3, 2015

o QPL 2015

University of Oxford, July 13-17, 2015

 HoTT workshop by QMAC at University of Oxford University of Oxford, November 7-10, 2014

Awards, Honours, and Prizes

- PhD Scholarship, School of Computer Science, University of Birmingham, UK May 2015
- Research Assistantship Scholarship, Faculty of Science, University of Western Ontario
 September 2013
- Entrance Scholarship, Department of Mathematics, University of Western Ontario
 September 2013
- University President Award For Outstanding Achievement In IMC Competitions 2011 and 2012

Mathematics Department of Ferdowsi University of Mashhad, July 2011, 2012

 University President Award For Outstanding Achievement In IMS Competitions 2010, 2011, and 2012

Mathematics Department of Ferdowsi University of Mashhad, March 2010, 2011, and 2012

Teaching Experiences

- Team Project Module, School of Computer Science University of Birmingham, Fall 2016
- Functional Programming Languages, School of Computer Science University of Birmingham, Fall 2015
- MATH 3122B (Metric Space Topology), Mathematics Department Western University, Fall 2014
- MATH 2122A (Real Analysis), Mathematics Department Western University, Spring 2014
- Calculus 1225 Help Center, Faculty of Science Western University, Fall 2014
- Teaching at Putnam Training Sessions, Western University Fall 2013, 2014
- Theory of Rings and Modules, Mathematics Department Ferdowsi University of Mashhad, Fall 2012
- Complex Variable and Applications, Mathematics Department Ferdowsi University of Mashhad, Fall 2011
- Number theory and Combinatorics at High school Mathematical Olympiad Camp NODET High School, 2011-2012

Skills

Computer Skills.

Programming Languages
 Haskell OCamb Mathematical

C, Haskell, OCaml, Mathematica

Languages.....

o English, German (modest), Dutch, Persian

References

- Professor Steven Vickers School of Computer Science, University of Birmingham, UK http://www.cs.bham.ac.uk/~sjv/ s.j.vickers@cs.bham.ac.uk
- Professor John L.Bell Philosophy Department, Western University, London, Canada http://publish.uwo.ca/~jbell/ jbell@uwo.ca
- Professor Martín Escardó School of Computer Science, University of Birmingham, UK http://www.cs.bham.ac.uk/~mhe/ m.escardo@cs.bham.ac.uk
- Professor Masoud Khalkhali Department of Mathematics, Western University, London, Canada http://www.math.uwo.ca/~masoud/index.html

- Professor Dan Christensen Department of Mathematics, Western University, London, Canada http://jdc.math.uwo.ca/ jdc@uwo.ca
- Professor Martin Pinsonnault Department of Mathematics, Western University, London, Canada http://www.math.uwo.ca/~mpinson/ mpinson@uwo.ca
- Professor Mohammad Sal Moslehian Department of Mathematics, Ferdowsi University http://profsite.um.ac.ir/~moslehian/ moslehian@um.ac.ir