Henri Roesch

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Sep 2010 - May 2011

Sep 2007 - May 2010

EDUCATION

Duke University

Aug 2011 – present

Ph.D. in Mathematics, expected May 2016

Areas of interest: Differential Geometry, General Relativity

Supervisor: Hubert L. Bray

Cambridge University, Trinity Hall College

M.A.St in Mathematics, 2011

with Distinction

Mentor/DGS: Tadashi Tokieda

University College London

B.Sc in Mathematics with Theoretical Physics, 2010

with First Class Honours Mentor: Ioannis Petridis

RESEARCH EXPERIENCE

Duke University, Mathematics Dept.

 $Graduate\ Student$

Specializing in Differential Geometry and General Relativity.

Other Coursework in Algebraic Topology, Partial Differential Equations, Representation Theory, Commutative Algebra and Algebraic Geometry.

Cambridge University, DAMTP.

Postgraduate Student

Coursework in Quantum Field Theory, Statistical Field Theory, General Relativity, Black Holes and Differential Geometry.

TEACHING EXPERIENCE

- Spring 2015 Math 106L, Laboratory Calculus II, Instructor
- Fall 2014 Math 111L, Laboratory Calculus I, Instructor
- Spring 2014 Math 111L, Laboratory Calculus I, Instructor
- Fall 2013 Math 111L, Laboratory Calculus I, Instructor
- Summer 2012 Math 111L, Laboratory Calculus I, Instructor
- Fall 2012 Math 111L, Laboratory Calculus I, Instructor
- Fall 2011 Math 26L, Laboratory Calculus I, Teaching Assistant

AWARDS

- Clinical Faculty Arts and Sciences Research Fellowship, Duke University
- Bateman Scholarship, Trinity Hall College, for performance on Part III
- Andrew Rosen Prize, UCL, for excellence in second year applied mathematics classes
- Jeffrey Prize, UCL, for first year examinations

SELECTED ACTIVITIES

- Duke University oral preliminary exam passed, September 2014
- Duke University oral qualifying exam passed, August 2012
- Duke University written qualifying exam passed, August 2011

CONFERENCES ATTENDED

• July 2014

ESI-EMS-IAMP Summer school on Mathematical Relativity Erwin Schrdinger Institute, Vienna.

June 2014

Thematic program on Nonlinear PDEs in Geometry and Physics University of Notre Dame, Indiana.

• September 2013

33rd Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE) University of Tennessee, Knoxville.

• August 2013

23rd annual Park City Mathematics Institute (PCMI) graduate summer school in Geometric Analysis Park City, Utah.

• May 2013

43rd Barrett memorial lectures on the proof of the Wilmore conjecture University of Tennessee, Knoxville.