

Curriculum Vitae
LUAN THACH HOANG

Contact Information

Department of Mathematics	Phone number: 979-845-8186
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Education

- 2002-present Texas A&M University, College Station, Texas
Ph.D. student in Mathematics (expected graduation: May 2005)
Dissertation: *The asymptotic expansions of regular solutions to 3-D Navier-Stokes equations and applications in the analysis of the helicity.*
Advisor: Ciprian Foias
Other committee members: James Bramble, Raytcho Lazarov, Carl Percy, Konam Rajagopal
- 2000-2002 Indiana University, Bloomington, Indiana
Graduate student in Mathematics
Advisor: Ciprian Foias
- 1998-2000 Arizona State University, Tempe, Arizona
M.A., Mathematics
Thesis: *Blowup versus regularity in the three dimensional Euler and Navier-Stokes equations.*
Advisor: Basil Nicolaenko
Other committee members: Don Jones, Alex Mahalov
- 1997-1998 National University, Hochiminh City, Vietnam
Graduate student in Mathematics
- 1993–1997 National University, Hochiminh City, Vietnam
B.S., Mathematics and Computer Science.
Thesis: *Holder continuity of the first derivatives of solutions of elliptic equations.*
Advisor: Duong Minh Duc
- 1993-1997 National University, Hochiminh City, Vietnam
B.S., Technology of Information.
Thesis: *Designing a toolbox of fuzzy logic and fuzzy sets and its*

applications in noise elimination,
joint project with Tran Thai Son.
Advisor: Le Hoai Bac

Awards

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| 2002-2005 | Departmental Graduate Fellowship, Texas A&M University |
| 2002 | AUF Fellowship, Texas A&M University |
| 2001 | Eberhard E.Hopf Fellowship, Indiana University
James P.Williams Memorial Award, Indiana University |
| 1997 | Outstanding Student Award, National University,
Hochiminh City, Vietnam |
| 1991-1992 | First prize, Competition in Mathematics for Eleventh grade
students, Hochiminh City, Vietnam |
| 1990 | First prize, Competition in Mathematics for Ninth grade students,
Phu Nhuan District, Hochiminh City, Vietnam |
| 1988 | Consolation prize, Competition in Mathematics for the Youth,
Hochiminh City, Vietnam |

Research Interests

Partial differential equations, dynamical systems, fluid mechanics.

Teaching Experience

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| 2002-present | Texas A&M University, College Station, Texas
Fall 2004, Teaching one section of M142, Business Mathematics II
(about 75 students)
Summer 2004, Assisted M152, Engineering Mathematics II
Two recitation sections and Maple Lab hours |
| 2001-2002 | Indiana University, Bloomington, Indiana
Associate Instructor
Spring 2002, Taught two sections of M025 Pre-Calculus
Fall 2001, Taught one section of M014 Basic Algebra |
| 1998-2000 | Arizona State University, Tempe, Arizona
Teaching Assistant
1999 International Teaching Assistant Seminar |

- 1997-1998 National University, Hochiminh City, Vietnam
Instructor
- 1996 National University, Hochiminh City, Vietnam
Teaching Assistant

Papers and Preprints

1. *On the helicity in 3D Navier-Stokes equations II*, (with Ciprian Foias, Basil Nicolaenko), in preparation.
2. *On the solutions to the normal form of the Navier-Stokes equations*, (with Ciprian Foias, Eric Olson, Mohammed Ziane), in preparation.
3. *On the helicity in 3D Navier-Stokes equations I*, (with Ciprian Foias, Basil Nicolaenko), 2004, submitted for publication.
4. *Blowup versus regularity in the three dimensional Euler and Navier-Stokes equations*. MA thesis, 2000.
5. *Holder continuity of the first derivatives of solutions of elliptic equations*. BS thesis, 1997.
6. *On the isolated discontinuity of solutions of elliptic equations*, (with Duong Minh Duc, Huynh Quang Vu), Proceeding of Mathematical conference, CIMPA School, Hochiminh City, Vietnam 1997.

Conferences and Seminars

- 3.2005 Special session on “Nonlinear Analysis and Applied Mathematics”
(scheduled) AMS 2005 Spring Southeastern Sectional Meeting, Bowling Green, KY,
March 18-19
 Talk: *On the solutions to the normal form of the Navier-Stokes
Equations*
- 1.2005 Applied Mathematics Seminar,
(scheduled) Department of Mathematics, Texas A&M University
 Talk: *On the solutions to the normal form of the Navier-Stokes
Equations*
- 12.2004 Minisymposium “PDE Problems in Fluid Dynamics and Geophysical
Fluid Dynamics”
SIAM Conference on Analysis of Partial Differential Equations Houston,
TX December 6-8, 2004.
 Talks: *On the convergence of the asymptotic expansions of the regular
solutions to the 3D-periodic Navier-Stokes equations and
applications to asymptotic behavior of helicity*. Parts I and II.
(substitute for C. Foias)

- 4.2004 Special session on “Partial Differential Equations”
AMS 2004 Spring Western Section Meeting, Los Angeles, CA, April 3-4
Talk: *On the helicity in 3D Navier-Stokes equations*
- 3.2004 Applied Mathematics Seminar,
Department of Mathematics, Texas A&M University
Talk: *On the helicity in 3D Navier-Stokes equations*
- 1997 Workshop and conference on Nonlinear Analysis, CIMPA school,
National University Hochiminh City, Vietnam

References

1. Prof. Ciprian Foias
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2. Prof. Raytcho Lazarov
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3. Sr. Lecturer Linda McKinley
Department of Mathematics
Indiana University
Rawles Hall
Bloomington, IN 47405
Email address: holdenl@indiana.edu
4. Prof. Basil Nicolaenko
Department of Mathematics
PO BOX # 871804
Arizona State University
Tempe, AZ 85287-1804
Email address: byn@stokes.la.asu.edu
5. Prof. Thomas Schlumprecht
Department of Mathematics

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6. Prof. Mohammed Ziane
USC Department of Mathematics
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3620 Vermont Avenue
Los Angeles, CA 90089-2532
Email address: ziane@math.usc.edu