CURRICULUM VITAE

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PERSONAL INFORMATION

Name: HANH VAN NGUYEN

Address: University of Alabama; Department of Mathematics
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Phone: Office: 205-348-5434

Gender: Male

Place of birth: QuangNgai, Vietnam

EDUCATION BACKGROUND

2016-2018: Postdoctoral Researcher, Department of Mathematics, University of Alabama, Tuscaloosa, USA.

2010-2016: Doctoral Student, Department of Mathematics, University of Missouri, Columbia, USA. (Ph.D. awarded in 2016.)
Dissertation title: Maximal Fourier Integrals and Multilinear Multiplier Operators.
Advisor: Dr. Loukas Grafakos.

2004-2006: Master of Science in Mathematics, College of Education, Hue University, Vietnam. (MS awarded in 2006.)
Thesis title: The Gauss map of spacelike surfaces on Lorentz-Minkowski spaces.
Advisor: Dr. Doan The Hieu.

1999-2003: Bachelor of Science in Mathematics, College of Education, Hue University, Vietnam. (BS awarded in 2003.)

TEACHING EXPERIENCE

2016-2018 Postdoc Instructor; Teaching Applied Differential Equations I, Calculus I; Department of Mathematics, University of Alabama, Tuscaloosa.

2015-2016 Graduate Teaching Assistant; Teaching Intermediate Algebra, College Algebra, Calculus I, II; Department of Mathematics, University of Missouri, Columbia.

2005-2010 Instructor; Teaching Calculus I, II, III, Linear Algebra, Affine Geometry, Projective Geometry and Differential Geometry; Department of Mathematics, Hue College of Education, Vietnam.

2003-2005 Teaching Assistant; Teaching Calculus I, II; Department of Mathematics, College of Education, Hue University, Vietnam.

AWARDS AND GRANTS

June 2015 Summer Research Grant, supported by Peter Casazza.

May 2015 Graduate Students Awards: Mathematics Distinguished Teaching Awards, University of Missouri, Columbia.

June 2014 Spring 2014 TA Choice Award, MSA and Department of Student Services, University of Missouri, Columbia.

June 2013 Summer Research Grant, supported by Loukas Grafakos.

June 2012 Summer Research Grant, supported by Loukas Grafakos.

April 2011 Ph.D. Qualifying Exam Awards (Algebra and Analysis).

2010-2012 Vietnam International Education Development (VIED) Fellowship.

Dec 2003 Second Prize of Scientific Research Program for Vietnamese Students; Minister of Education and Training, Vietnam.

May 2002 Second Prize in Analysis and First Prize in Algebra; Vietnamese Mathematical Olympiad for college students; VMS.

RESEARCH EXPERIENCE

2015-2016 Worked in a project: Paulsen problem and mean square error problems, joint work with Peter Casazza.

2015-2016 Worked in a project: Higher-dimensional Multicommutators, joint work with Grafakos, He, and Yan.

2014-2015 Worked in a project: Multilinear Fourier Multipliers, partially joint work with Grafakos, Miyachi, and Tomita.

2012-2013 Worked in a project: Fourier integral operators.

2008-2010 Participated in a project: Manifolds with density, supported by Doan The Hieu.

2005-2007 Participated in a project: Isoperimetric problems with boundary conditions, supported by Doan The Hieu.

2002-2003 Participated in a project: On the comass norm of k-covector and minimal surfaces, supported by Doan The Hieu.

RESEARCH INTERESTS

Harmonic Analysis: Fourier integral operators, Calderón-Zygmund operators, multilinear Fourier multiplier operators, the boundedness of these operators on weighted setting and variable Hardy spaces.

Frame Theory: Phase retrieval, phaseless reconstruction, positive operator-valued measures, applications to quantum information.

Differential Geometry: Minimal surfaces, calibrations, manifolds with density, geometric measure theory.

PUBLICATIONS

[14] DAVID CRUZ-URIBE AND HANH VAN NGUYEN, *Multilinear multipliers and singular integrals with smooth kernels on Hardy spaces*, submitted.

[10] LOUKAS GRAFAKOS AND HANH VAN NGUYEN, *The Hörmander multiplier theorem III: The bilinear case and interpolation*, submitted.

[13] DAVID CRUZ-URIBE, KABE MOEN, HANH VAN NGUYEN, *The boundedness of multilinear Calderón-Zygmund operators on weighted and variable Hardy spaces*, accepted.

[12] LOUKAS GRAFAKOS, SHOHEI NAKAMURA, HANH VAN NGUYEN, YOSHIHIRO SAWANO, *Conditions for boundedness into Hardy spaces*, accepted.

[11] LOUKAS GRAFAKOS, SHOHEI NAKAMURA, HANH VAN NGUYEN, YOSHIHIRO SAWANO, *Multiplier conditions for boundedness into Hardy spaces*, accepted.

[9] LOUKAS GRAFAKOS, DANQING HE, HANH VAN NGUYEN, AND LIXIN YAN, *Multicommutators and multiplier theorems*, to appear.

[8] L. GRAFAKOS, H. HE, AND P. HONZÍK, H. V. NGUYEN, *The Hörmander multiplier theorem I: The linear case*, to appear.

[7] TRAVIS BEMROSE, PETER G. CASAZZA, DESAI CHENG, JOHN HAAS, AND HANH VAN NGUYEN, *Computing the Distance Between Frames and Between Subspaces of a Hilbert Space*, Springer International Publishing; (2017), 81–99.

[6] LOUKAS GRAFAKOS, AKIHIKO MIYACHI, HANH VAN NGUYEN, AND NAOHITO TOMITA, *Multilinear Fourier multipliers with minimal Sobolev regularity, II*, J. Math. Soc. Japan **69** (2017), no. 2, 529–562.

[5] LOUKAS GRAFAKOS AND HANH VAN NGUYEN, *Multilinear Fourier multipliers with minimal Sobolev regularity, I*, Colloq. Math. **144** (2016), no. 1, 1–30.

[4] SARA BOTELHO-ANDRADE, PETER CASAZZA, HANH VAN NGUYEN, JANET TREMAIN, *Phase retrieval verses phaseless reconstruction*, J. Math. Anal. Appl. **436** (2016), no. 1, 131–137.

[3] HANH VAN NGUYEN, *A maximal Fourier integral operator and an application*, J. Pseudo-Differ. Oper. Appl. **4** (2013), no. 4, 443–456.

[2] DOAN THE HIEU AND NGUYEN VAN HANH, *Analytic extension of a maximal surface in $\mathbb{L}^3$ along its boundary*, Acta Math., Univ. Comenianae **78** (2009), no. 1, 29–38.

[1] DOAN THE HIEU, NGUYEN VAN HANH, *Some 3-calibrations have faces containing a special Lagrangian's*, East-West J. Math. **4** (2002), no. 2, 149–155

MEETINGS AND CONFERENCES ATTENDED

2018 *Workshop on Real Harmonic Analysis*, ICMAT, Madrid, Spain.

2015 *Analysis Seminar*, Department of Mathematics, The University of Kansas, USA.

2014 *Harmonic Analysis & PDEs Conference*, The University of Chicago, USA.

2007 *Analytic extension of a maximal surface in $\mathbb{L}^3$ along its boundary*, DAHITO conference, Vinh, Vietnam.

2004 *Some results on 3-calibrations*, Winter school of algebraic topology, Hanoi, Vietnam.