

Curriculum Vitae
Kasso Akochayé Okoudjou

I. Personal Information

Department of Mathematics, Tufts University, Medford, MA 02155
kasso.okoudju@tufts.edu, <https://sites.tufts.edu/kasso>

I.A. Academic Appointments at Tufts University

Tufts University Professor 7/2020 – present

I.B. Academic Appointments at UMD

University of Maryland Professor 7/2015 – 6/2020

University of Maryland Associate Professor 7/2010 – 6/2015

University of Maryland Assistant Professor 8/2006 – 6/2010

I.C. Administrative Appointments at UMD

University of Maryland Associate Chair for Undergraduate Studies 7/2016 – 6/2018

I.D. Other Employment

M. I. T. Martin Luther King Visiting Prof. July 2018 – June 2020

Math. Scis. Rsch. Inst. Research Member April–May 2017

Technische Universität Berlin Humboldt Fellow 5/2012 – 8/2012

University of Osnabrück, Germany Humboldt Fellow 2010 – 2011

E. S. I. Vienna, Austria Junior Research Fellow 6/2005 – 7/2005

Cornell University H. C. Wang Assistant Professor 7/2003 – 7/2006

I.E. Educational Background

Georgia Institute of Technology Ph.D. Mathematics 8/2003

Georgia Institute of Technology M.S. in Electrical Engineering 5/2003

National University of Benin Master’s in Mathematical Sciences 9/1996

II. Research Support, Awards, Honors and Recognition

II.1. Research Support My research has been supported by grants from various agencies including the US National Science Foundation, the US Army Research Office, and the Simons Foundation.

II.2. Research Fellowships, Prizes and Awards

Merrin Fund for Faculty Excellence, School of Arts and Sciences, Tufts University, 2020–2021.

Humboldt Research Fellowship for Experienced Researchers, 2010–2012.

Erwin Schrödinger Junior Fellowship, 2005.

II.3. Teaching Awards

CMPS Dean's Award for Excellence in Teaching for 2009, CMPS, University of Maryland.

2008 Celebrating Excellence Outstanding Mentor Award, CMPS, University of Maryland.

Junior Faculty Teaching Award, Department of Mathematics, Cornell University, 2004.

III Selected Publications (Full texts at <https://sites.tufts.edu/kasso>)

1. A. Bényi and K. A. Okoudjou, "Modulation Spaces: With Applications to Pseudodifferential Operators and Nonlinear Schrödinger Equations," Applied and Numerical Harmonic Analysis, Birkhäuser, Basel, 2020.
2. K. A. Okoudjou (Ed), "Finite Frame Theory: A Complete Introduction to Overcompleteness", Proceedings of Symposia in Applied Mathematics, **73**, AMS (2016).
3. Weak uncertainty principles on fractals (with R. S. Strichartz), J. Fourier Anal. Appl. **11** (2005), no. 3, 315–331.
4. K. A. Okoudjou, "Finite Frame Theory: A Complete Introduction to Overcompleteness," Ed., Proceedings of Symposia in Applied Mathematics, **73**, American Mathematical Society, Providence, RI, 2016.
5. A. Bényi, K. Gröchenig, K. A. Okoudjou, and L. Rogers Unimodular Fourier multipliers on modulation spaces, J. Funct. Anal., **246** (2007), no. 2, 366–384.
6. K. A. Okoudjou, L. Saloff-Coste and A. Teplyaev, An uncertainty principle for fractals, graphs and manifolds, Trans. Amer. Math. Soc. **360** (2008), no. 7, 3857–3873.
7. K. A. Okoudjou and Y. Hur, Scaling Laplacian pyramids, SIAM J. Matrix Anal. Appl., **36**(1) (2015), 348–365.
8. M. Bownik, M. S. Jakobsen, J. Lemvig, and K. A. Okoudjou, On Wilson bases in $L^2(\mathbb{R}^d)$, SIAM J. Matrix Anal. Appl., **49** (2017), no. 5, 3999–4023.
9. K. Okoudjou and C. Wickman, Duality and geodesics for probabilistic frames, Linear Algebra Appl., **532** (2017), 198–221.
10. R. Balu, P. J. Koprowski, K. A. Okoudjou, J. S. Park, and G. Siopsis, Equiangular quantum key distribution in more than two dimensions, J. Phys. A: Math. Theor., **52** (2019), no. 075202.
11. K. A. Okoudjou, An invitation to Gabor analysis, Notices Amer. Math. Soc., **66** (2019), no. 6, 808–819.
12. K. A. Okoudjou, Extension and restriction principles for the HRT conjecture, J. Fourier Anal. Appl., **25** (2019), no. 4, 1874–1901.

IV. Mentoring and Advising.

Matthew Hirn: (Advised with John Benedetto): PhD, 2009, "Enumeration of Harmonic Frames and Frame Based Dimension Reduction."

Clare Wickman: PhD, 2014, "An Optimal Transport Approach to Some Problems in Frame Theory."

Chae Clark: (Advised with Wojciech Czaja): PhD, 2016, "Spectral Frame Analysis and Learning through Graph Structure."

Matthew Begué: (Advised with John Benedetto): PhD, 2016, “ Expedition in Data and Harmonic Analysis on Graphs.”

Ganiou Atindéhou : (Advised with Yébéni Kouagou): Ph.D. 2018, “Sur l’ ensemble des repères de Gabor engendrés par des B -splines” (Institut de Mathématiques et de Sciences Physiques (IMSP), Dangbo, Bénin).

Shujie Kang: (Advised with John Benedetto): PhD, 2020, “Generalized frame potential and problems related to SIC-POVM”.

V. Service and Outreach

V.A. Editorial Boards

Associate editor for the Journal of Pseudo-Differential Operators and Applications.

Associate editor for the Journal of Function Spaces.

Associate editor for Complex Analysis and Operator Theory.

Associate editor for Annals of Functional Analysis.

V.B. Offices and Committee Memberships

- American Mathematical Society (AMS). Member of the Executive Committee of the Council, March 1, 2020–February 28, 2024, Member at Large of the Council, February 1, 2019 – January 31, 2022; AMS Committee on Science Policy, February 1, 2019 – January 31, 2022; Member of The Notices Chief Editor Search Committee, February 1, 2020 – January 31, 2022.

- Co-chair of the AMS’s Task Force on Understanding and Documenting the Historical Role of the AMS in Racial Discrimination, July 1, 2020 – June 30, 2021

- Mathematical Association of America (MAA). Member of of the Council on Prizes and Awards January 1, 2020 – January 31, 2023.

- National Association of Mathematics (NAM).

- Society for Industrial and Applied Mathematics (SIAM).