

Curriculum Vitae
Ziad H. Musslimani

April 10, 2016

General Information

University address: Applied Mathematics
Department of Mathematics
College of Arts and Sciences
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Professional Preparation

- 2000 Ph.D., Technion-Israel Institute of Technology, Haifa, Israel. Major: Applied Mathematics.
- 1995 Masters, Technion-Israel Institute of Technology, Haifa, Israel. Major: Physics.
- 1995 Bachelor, Technion-Israel Institute of Technology, Haifa, Israel. Major: Applied Mathematics. Summa Cum Laude.
- 1991 Bachelor, Technion-Israel Institute of Technology, Haifa, Israel. Major: Physics.

Nondegree Education and Training

- 2000–2003 Applied Mathematics, University of Colorado at Boulder, Colorado.

Professional Experience

- 2016–present Tenured Full Professor, Mathematics, Florida State University.

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| 2011–present | Faculty Associate, Geophysical Fluid Dynamics Institute, Florida State University. |
| 2009–2016 | Tenured Associate Professor, Mathematics, Florida State University. |
| 2005–2009 | Assistant Professor, Mathematics, Florida State University. |
| 2003–2005 | Assistant Professor, University of Central Florida. |
| 2000–2003 | Postdoctoral Research Associate, Department of Applied Mathematics, University of Colorado. |

Language Proficiency

Arabic - native in speaking, reading, and writing.
 English - fluent in speaking, reading, and writing.
 German - fluent in speaking, reading, and writing.
 Hebrew - native in speaking, reading, and writing.

Visiting Professorship(s)

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| 2012–2013 | Department of Mathematics, University of Duesseldorf, Germany. |
| 2012 | Department of Theoretical Physics, Vienna University of Technology, Austria. |
| 2011 | Department of Applied Mathematics, Columbia University, New York City, New York. |
| 2011 | Department of Mathematics, University of Toronto. |
| 2009 | Department of Mathematics, Technion - Israel Institute of Technology. |

Honors, Awards, and Prizes

Lady Davis Visiting Professorship, Lady Davis Trust, Israel (2016).
 DFG Collaboration Grant, Deutsche Forschungsgemeinschaft (2015).
 DAAD Fellowship, German Academic Exchange Services, Germany (2013).
 Teaching Award, Technion-Israel Institute of Technology, Haifa, Israel (1998).
 Technion President Award, Technion-Israel Institute of Technology, Haifa, Israel (1994).

Fellowship(s)

Rothschild Fellowship - Rothschild Foundation (2000–2001).
Eshkol Foundation - Israeli Ministry of Science (1999–2000).

Current Membership in Professional Organizations

OSA -- Optical Society of America
SIAM -- Society for Industrial and Applied Mathematics

Teaching

Courses Taught

Elementary Partial Differential Equations I (MAP4341)
Elementary Partial Differential Equations II (MAP4342)
Advanced Seminar in Applied Mathematics (MAP6939)
Elementary Partial Differential Equations I (MAP4341)
Engineering Mathematics I (MAP3305)
Methods of Applied Mathematics I (MAP5165)
Ordinary Differential Equations (MAP2302)
Special Topics in Mathematics (MAT5933)
Topics in Discrete or Computational Mathematics (MAD4934)
Elementary Partial Differential Equations I (MAP5345)
Selected Topics in Mathematics (MAT5932)
Topics in Applied Mathematics (MAP4934)
Wave Propagation Theory (MAP5513)
Doctoral Student Dissertation (MAT 8964)
PRELIM DOCTORAL EXAM (MAT 6980)
Student PHD Candidacy Preparation (MAT6908)
Seminar on nonlinear Waves (MAP6939)
Calculus with Analytic Geometry I (MAC2311)
Numerical Analysis I (MAD3703)
Calculus with Analytic Geometry III (MAC2313)
Calculus with Analytic Geometry II (MAC2312)
Engineering Mathematics II (MAP3306)
Mathematical Modeling (MAP5107)
Vector Calculus with Introduction to Tensors (MAP4153)
Applied Numerical Mathematics (MAP 5385)
Elementary Linear and Matrix Algebra (MAS 3105)
Honor Calculus III (MAC 2313H)
Applied Boundary Value Problems II (MAP 4364)
Honor Calculus II (MAC 2312H)

Applied Boundary Value Problems I (MAP 4363)
Honor Calculus I (MAC 2311H)

Doctoral Committee Chair

Cole Justin, T., doctoral candidate. *High-order Dispersion, Periodic Potentials and Disorder in the Nonlinear Schrodinger Equation.* [Passed the prospectus exam on February 9th, 2015. Anticipated date of Graduation May 2016]

Chen Jihua, doctoral student. *Computational methods for stochastic differential equations with applications to finance.* [Passed the applied mathematics qualifying exams]

Doctoral Committee Member

Jones, D. C., doctoral candidate.

Woodruff, C., doctoral candidate.

Eilertsen Justin, doctoral candidate.

Xu Xiangrong, doctoral student.

Doctoral Committee University Representative

Benjamin McLaughin, doctoral candidate. *Reduced order modeling for the advection-diffusion-reaction equation with applications to environmental problems.*

Master's Committee Chair

Blais Rafeal Mondal, graduate. (2012).

Bachelor's Committee Chair

Rodenbach Linsey, student. *Swimming Microorganisms on Curves Surfaces.* [Honors in the major thesis]

Whiteman Brandi, student. *Modeling and Simulating Rogue Waves In the Ocean.* [Honors in the major thesis]

Yarboro Jennifer, student. *Integrating Dynamics of Complex Systems with Big Data.* [Honors in the major thesis]

Kelly Ann Pawlak, student. *Nonlinear Dynamics of Bose-Einstein Condensation.* [Honors in the major and winner of the FSU Undergraduate Research Award 2014]

Moeller Laura, student. *Linear and Nonlinear Water Waves Equations.* [University Of Duesseldorf, Germany, 2014]

Roeder Tanja, student. *Dispersive Quantization.* [University of Duesseldorf, Germany, 2014]

Research and Original Creative Work

Publications

Invited Journal Articles

Makris, K., Khajavikhan, M., Musslimani, Z. H., Rotter, S., & Christodoulides, D. (contract). Optical parity-time symmetry: A new paradigm exploiting gain and loss. *Science*.

Refereed Journal Articles

Ablowitz, M. J., & Musslimani, Z. H. (2016). Inverse scattering transform for the integrable nonlocal nonlinear Schrodinger equation. *Nonlinearity*, 29, 24.

Cole, J., Makris, K., Musslimani, Z. H., Christodoulides, D., & Rotter, S. (2016). Two-fold PT symmetry in doubly exponential optical lattices. *Physical Review A*, 93, 7.

Cole, J., & Musslimani, Z. H. (2015). Spectral Transverse Instabilities and Soliton Dynamics in the Higher Order Multidimensional Nonlinear Schrodinger Equation. *Physica D*, 313, 26-36.

Makris, K. G., Musslimani, Z. H., Christodoulides, D. N., & Rotter, S. (2015). Constant-intensity waves and their modulation instability in non-Hermitian potentials. *Nature Communications*, 6, 7257.

Ablowitz, M. J., & Musslimani, Z. H. (2014). Integrable discrete PT symmetric model. *Physical Review E*, 90, 032912.

Cole, J., & Musslimani, Z. H. (2014). Band gaps and lattice solitons for the higher-order nonlinear Schrödinger equation with a periodic potential. *Physical Review A*, 90, 013815.

Sarma, A. K., Miri, M. A., Musslimani, Z. H., & Christodoulides, D. N. (2014). Continuous and discrete Schrödinger systems with parity-time-symmetric nonlinearities. *PHYSICAL REVIEW E*, 89, 052918.

Ablowitz, M. J., & Musslimani, Z. H. (2013). Integrable nonlocal nonlinear Schrodinger equation. *Physical Review Letters*, 110, 064105.

Makris, K. G., El Ganainy, R., Christodoulides, D. N., & Musslimani, Z. H. (2011). PT symmetric periodic optical potentials. *Int. J. Theor. Phys.*, 50, 1019.

Makris, K. G., El Ganainy, R., Christodoulides, D. N., & Musslimani, Z. H. (2010). PT

symmetric optical lattices. *Physical Review A*, 81, 063807.

Cao, Y., Musslimani, Z. H., & Titi, E. S. (2009). Modulation theory for self-focusing in the nonlinear Schrödinger-Helmholtz equation. *Numerical Functional Analysis and Optimization*, 30, 46-69.

Akkermans, E., Ghosh, S., & Musslimani, Z. H. (2008). Numerical study of one-dimensional and interacting Bose-Einstein condensates in a random potential. *J. Phys. B*, 41, 045302.

Cao, Y., Musslimani, Z. H., & Titi, E. S. (2008). Nonlinear Schrödinger-Helmholtz equation as numerical regularization of the nonlinear Schrödinger equation. *Nonlinearity*, 21, 879.

Makris, K. G., El Ganainy, R., Christodoulides, D. N., & Musslimani, Z. H. (2008). Beam dynamics in PT symmetric optical lattices. *Physical Review Letters*, 100, 103904.

Musslimani, Z. H., Makris, K. G., El Ganainy, R., & Christodoulides, D. N. (2008). Analytical solutions to a class of nonlinear Schrödinger equations with PT-like potentials. *J. Phys. A: Math. Theor*, 41, 244019.

Musslimani, Z. H., Makris, K. G., El Ganainy, R., & Christodoulides, D. N. (2008). Optical solitons in PT periodic potentials. *Physical Review Letters*, 100, 030402.

El-Ganainy, R., Christodoulides, D. N., Musslimani, Z. H., Rotschild, C., & Segev, M. (2007). Optical beam instabilities in nonlinear nanosuspensions. *Optics Letters*, 32, 3185.

El-Ganainy, R., Makris, K. G., Christodoulides, D. N., & Musslimani, Z. H. (2007). Theory of coupled optical PT symmetric structures. *Optics Letters*, 32, 2632.

Ablowitz, M. J., Fokas, A. S., & Musslimani, Z. H. (2006). On a New Nonlocal Formulation of Water Waves. *Journal of Fluid Mechanics*, 562, 313-33.

Albowitz, M. J., Julien, K., Musslimani, Z. H., & Weinstein, M. I. (2005). Wave dynamics in optically modulated waveguide arrays. *Physical Review E*, 71, 42-65.

Albowitz, M. J., & Musslimani, Z. H. (2005). Spectral renormalization method for computing self-localized solutions to nonlinear systems. *Optics Letters*, 30, 2140.

Buljan, H., Cohen, O., Fleischer, J. W., Schwartz, T., Segev, M., Musslimani, Z. H., Efremidis, N. K., & Christodoulides, D. N. (2004). Random-Phase Solitons in Nonlinear Periodic Lattices. *Physical Review Letters*, 92, 42-65.

Musslimani, Z., & Yang, J. (2004). Self-trapping of light in a two-dimensional photonic lattice. *Journal of the Optical Society of America B*, 21, 973-981.

Ablowitz, M. J., & Musslimani, Z. H. (2003). Dark and gray strong dispersion-managed solitons.

Physical Review E, 67, 025601-025606.

Ablowitz, M. J., & Musslimani, Z. H. (2003). Discrete spatial solitons in a diffraction-managed nonlinear waveguide array: a unified approach. *Physica D*, 184, 276.

Kevrekidis, P. G., Malomed, B. A., & Musslimani, Z. H. (2003). Discrete gap solitons in a diffraction- managed waveguide array. *EUROPEAN PHYSICAL JOURNAL D*, 23, 421-436.

Yang, J., & Musslimani, Z. H. (2003). Fundamental and vortex solitons in a two-dimensional optical lattice. *OPTICS LETTERS*, 28, 2094.

Ablowitz, M. J., & Musslimani, Z. H. (2002). Discrete vector spatial solitons in a nonlinear waveguide array. *Physical Review E*, 65, 056618-056631.

Ablowitz, M. J., Musslimani, Z. H., & Biondini, G. (2002). Methods for discrete solitons in nonlinear lattices. *Physical Review E*, 65, 026602-026606.

Ablowitz, M. J., & Musslimani, Z. H. (2001). Discrete diffraction managed spatial solitons. *Physical Review Letters*, 87, 254102-254106.

Carmon, T., Uzdin, R., Pigier, C., Musslimani, Z. H., Segev, M., & Nepomnyashchy, A. (2001). Rotating Propeller Solitons. *Physical Review Letters*, 87, 143901-143905.

Musslimani, Z. H., Soljacić, M., Segev, M., & Christodoulides, D. N. (2001). Delayed-Action Interaction and Spin-Orbit Coupling between Solitons. *Physical Review Letters*, 86, 799-802.

Musslimani, Z. H., Soljacić, M., Segev, M., & Christodoulides, D. N. (2001). Interactions between two-dimensional composite vector solitons carrying topological charges. *Physical Review E*, 62, 066608-066618.

Musslimani, Z. H., & Yang, J. (2001). Transverse instability of strongly coupled dark-bright Manakov vector solitons. *OPTICS LETTERS*, 26, 1981.

Pigier, C., Uzdin, R., Carmon, T., Segev, M., Nepomnyashchy, A., & Musslimani, Z. H. (2001). Collisions between (2+1)D rotating propeller solitons. *OPTICS LETTERS*, 26, 1577-1579.

Anastassiou, C., Soljacic, M., Segev, M., Eugenieva, E. D., Christodoulides, D. N., Kip, D., Musslimani, Z. H., & Torres, J. P. (2000). Eliminating the transverse instabilities of Kerr solitons. *PHYSICAL REVIEW LETTERS*, 85, 4888-4891.

Carmon, T., Anastassiou, C., Lan, S., Kip, D., Musslimani, Z. H., Segev, M., & Christodoilides, D. N. (2000). Observation of two-dimensional multimode solitons. *OPTICS LETTERS*,

25, 1113-1115.

Musslimani, Z. H., & Pismen, L. M. (2000). Dynamic quasicrystalline patterns: Wave-mode-Turing-mode resonance with Turing-mode self-interaction. *PHYSICAL REVIEW E*, 62, 389-396.

Musslimani, Z. H., Segev, M., & Christodoulides, D. N. (2000). Multi-component two-dimensional solitons carrying topological charges. *OPTICS LETTERS*, 25, 61-63.

Musslimani, Z. H., Segev, M., Christodoulides, D. N., & Soljacic, M. (2000). Composite Multi Hump Vector Solitons Carrying Topological Charge. *PHYSICAL REVIEW LETTERS*, 84, 1164-1167. doi:hysRevLett.84.1164

Musslimani, Z. H., & Pismen, L. M. (1999). Resonant optical patterns in sodium vapor in a magnetic field. *PHYSICAL REVIEW A*, 59, 1571-1576.

Musslimani, Z. H., Segev, M., Nepomnyashchy, A., & Kivshar, Y. S. (1999). Suppression of transverse instabilities for vector solitons. *Physical Review E*, 60, 1170-1173.

Musslimani, Z. H. (1998). Long Wave Instability In Optical Parametric Oscillators. *Physica A: Statistical Mechanics and its Applications*, 249, 141-145.

Musslimani, Z. H., & Ben-Aryeh, Y. (1998). Quantum phase distribution of thermal phase-squeezed states. *PHYSICAL REVIEW A*, 57, 1451-1453.

Musslimani, Z. H., & Malomed, B. A. (1998). Modulational instability in bulk dispersive quadratically nonlinear media. *Physica D: Nonlinear Phenomena*, 123, 235-243.

Muslimani, Z. H., BRAUNSTEIN, S., MANN, A., & REVZEN, M. (1995). Destruction of photocount oscillations by thermal noise. *PHYSICAL REVIEW A*, 51, 4967-4973.

Kamal, M., Musslimani, Z. H., & Auerbach, A. (1995). Enhancement of Persistent Currents by Hubbard Interactions in Disordered 1D Rings: Avoided Level Crossings Interpretation. *Journal de Physique I*, 5, 1487-1499.

Invited Book Chapters

Ablowitz, M. J., Hirooka, T., & Musslimani, Z. H. (2000). Nonlinear Waves and (Interesting) Applications, in Nonlinear Dynamics: From Optics to Ecosystems (Lecture Notes in Complex Systems). In World Scientific (Ed.), *Nonlinear Dynamics: From Optics to Ecosystems (Lecture Notes in Complex Systems)*. World Scientific.

Ablowitz, M. J., & Musslimani, Z. H. (2000). Dispersion-managed dark and gray solitons. In World Scientific (Ed.), *Nonlinear Physics: Theory and Experiment*. World Scientific.

Carmon, T., Uzdin, R., Pigier, C., Musslimani, Z. H., Segev, M., & Nepomnyashchy, A. (2000). Rotating Propeller Solitons, in Soliton-Driven Photonics. In NATO Advanced Study Institute, Kluwer Academic Publisher (Ed.), *Rotating Propeller Solitons, in Soliton-Driven Photonics*. NATO Advanced Study Institute, Kluwer Academic Publisher.

Presentations

Invited Presentations at Conferences

Musslimani, Z. H. (accepted). *Integrable Nonlocal Nonlinear Schrödinger Equation*. Presentation to be given at Eighth International Congress on Industrial and Applied Mathematics, ICIAM. (International)

Musslimani, Z. H. (presented 2015). *Integrable Continuous and Discrete Nonlinear Models*. Presentation at The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena:, IMACS and University of Georgia, University of Georgia, Athens, Georgia. (International)

Musslimani, Z. H. (presented 2015). *Constant intensity waves and their modulation instability in non-Hermitian potentials*. Presentation at CROF, Cruising Optics Frontiers, Optical Society of America, Greek Islands, Greece. (International)

Musslimani, Z. H. (presented 2014). *Integrable PT symmetric nonlinear models*. Presentation at Dynamics Days South America Viña del Mar, Chile, University of Chile, University of Chile. (International)

Musslimani, Z. H. (presented 2013). *The vector nonlinear Schrödinger equations*. Presentation at Emerging Applications of the Nonlinear Schrödinger Equations, IPAM, UCLA, Los Angeles, USA. (National)

Musslimani, Z. H. (presented 2013). *Waves in Disordered Media*. Presentation at IMACS Conference on Nonlinear Waves, University of Georgia, Athens, Georgia, USA. (International)

Musslimani, Z. H. (presented 2011). *Stability and formation of nonlinear coherent structures in the PT invariant nonlinear Schrödinger equation*. Presentation at The Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, University of Georgia, Athens, Georgia, USA. (International)

Musslimani, Z. H. (presented 2010). *The PT invariant nonlinear Schrödinger equation and its application in optics*. Presentation at Frontiers in Nonlinear Waves, in honor of Vladimir Zakharov's 70t, University of Arizona. (International)

- Musslimani, Z. H. (presented 2007). *Bose-Einstein Condensation in Random Potentials*. Presentation at The Fifth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, IMACS & University of Georgia, Athens, Georgia, USA. (International)
- Musslimani, Z. H. (presented 2006). *Bose-Einstein Condensation in Random Potentials*. Presentation at SIAM Nonlinear Waves and Coherent Structures, University of Washington, Seattle, Washington, University of Washington, Seattle, Washington. (International)
- Musslimani, Z. (presented 2005). *Localized Structures in two-dimensional Photonic Lattices*. Presentation at SIAM Conference on Applications of Dynamical Systems, Society for Industrial and Applied Mathematics (SIAM), Snowbird, Salt Lake City, Utah. (International)
- Musslimani, Z. H. (presented 2005). *Computational method for numerical solution of nonlinear boundary value problems*. Presentation at International Conference on Nonlinear Waves, Integrable Systems and Applications, University of Colorado at Colorado Springs, CO, University of Colorado. (International)
- Musslimani, Z. H. (presented 2004). *Multiscale Asymptotic Analysis of Wave Propagating in Nonlinear Periodic Media*. Presentation at The Second Israeli Mini-Workshop in Applied and Computational Mathematics, Bar - Ilan University, Israel, Bar - Ilan University, Israel. (International)
- Musslimani, Z. (presented 2003). *Vortices in Two-Dimensional Bose-Einstein Condensation*. Presentation at American Mathematic Society Regional Meeting, AMS. (National)
- Musslimani, Z. H. (presented 2002). *Self-Trapping of Light in a Diffraction Managed Waveguide Array*. Presentation at Intrinsic Localized Modes, Los Alamos National Laboratory, Los Alamos National Laboratory, Los Alamos, New Mexico. (International)
- Musslimani, Z. H. (presented 2001). *Discrete Solitons*. Presentation at Third IMACS International Conference on Nonlinear Evolution Equation, IMACS, University of Georgia, Athens, Georgia, USA. (International)
- Musslimani, Z. H. (presented 2000). *Suppression of transverse instabilities for vector solitons Workshop on*. Presentation at Topological Defects in Non-Equilibrium Systems and Condensed Matter, Max- Planck-Institute for Physics of Complex Systems, Dresden, Germany. (International)
- Musslimani, Z. (presented 2000). *Suppression of transverse instabilities for vector solitons*. Presentation at Topological Defects in Non-Equilibrium Systems and Condensed Matter, Max- Planck-Institute for Physics of Complex Systems, Dresden, Germany. (International)

Invited Lectures and Readings of Original Work

Musslimani, Z. H. (2014). *Integrable Nonlocal Nonlinear Schrodinger Equation*. Delivered at University of Bielefeld, Germany, Mathematics Colloquium. (International)

Musslimani, Z. H. (2012). *Dynamics of Nonlinear Dispersive Waves: Analysis and Applications*. Delivered at Vienna University of Technology, Vienna, Austria, Mathematics Colloquium. (International)

Musslimani, Z. H. (2012). *Nonlinear Dynamics of Dispersive Waves: Analysis and Applications*. Delivered at Heinrich-Heine-Universitt Duesseldorf, Germany, Mathematics Colloquium. (International)

Musslimani, Z. H. (2012). *Transport and localization in periodic and random media*. Delivered at Center for Nonlinear Science, University of Muenster, Germany, Mathematics Colloquium. (International)

Musslimani, Z. H. (2012). *Water Waves and Solitons: A Historical Perspective*. Delivered at Geophysical Fluid Dynamics Institute, Colloquium, FSU. (Regional)

Musslimani, Z. H. (2011). *Introduction to Solitons in Optics and Fluid Mechanics*. Delivered at Vienna University of Technology, Theoretical Physics Colloquium. (International)

Musslimani, Z. H. (2011). *Nonlinear Waves with Broken Time-Reversal Symmetry*. Delivered at University of Central Florida, Mathematics Colloquium. (State)

Musslimani, Z. H. (2011). *Numerical study of one-dimensional Bose-Einstein condensates in a random potential*. Delivered at University of Toronto, PDE/Applied Mathematics Seminar. (International)

Musslimani, Z. H. (2011). *Numerical study of one-dimensional Bose-Einstein condensates in a random potential*. Delivered at PDE/Applied Mathematics Seminar, McMaster University, Hamilton, Ontario, Canada. (International)

Musslimani, Z. H. (2011). *On the problem of Anderson localization for the one-dimensional nonlinear Schrödinger equation with a random potential*. Delivered at PDE Seminar, Columbia University, New York City, New York, USA. (National)

Musslimani, Z. H. (2011). *PT Symmetry in Nonlinear Optics*. Delivered at Max-Planck Institute for Physics of Complex Systems, Dresden, Germany. (International)

Musslimani, Z. H. (2011). *Solitons in PT Symmetric Potentials*. Delivered at University of Heidelberg, Germany, Department of Physics. (International)

Musslimani, Z. H. (2011). *Wave Propagation in Honeycomb Lattices*. Delivered at Nonlinear Waves Seminar, Columbia University, New York City, New York, USA. (National)

Musslimani, Z. H. (2010). *On the problem of Anderson localization for the random nonlinear Schrödinger equation*. Delivered at Applied and Computational Mathematics, Florida State University, Tallahassee, Florida, USA. (National)

Musslimani, Z. H. (2010). *The PT invariant nonlinear Schrödinger equation and its application in optics*. Delivered at PDE and Applied Mathematics Seminar, Technion-Israel Institute of Technology, Haifa, Israel. (International)

Musslimani, Z. H. (2010). *The PT invariant nonlinear Schrödinger equation and its application in optics*. Delivered at Physics of Complex Systems Seminar, Weizmann Institute of Science, Rehovot, Israel. (International)

Musslimani, Z. H. (2008). *Wave Propagation in Parity-Time (PT) Symmetric Media*. Delivered at Mathematics Colloquium, Florida State University, Tallahassee, Florida, USA. (State)

Musslimani, Z. H. (2005). *Multiscale Asymptotic Analysis of Wave Propagating in Nonlinear Periodic Media*. Delivered at Northwestern University, Evanston, Illinois, Department of Applied Mathematics. (National)

Musslimani, Z. H. (2005). *Numerical Methods for Nonlinear Boundary Value Problems*. Delivered at Weizmann Institute of Sciences, Department of Mathematics. (International)

Musslimani, Z. H. (2004). *Localization of Bose-Einstein Condensate in a Two-Dimensional Optical Lattice*. Delivered at Florida State University, Applied Mathematics Seminar. (State)

Musslimani, Z. H. (2004). *Localized Structures in Two-Dimensional Optical Lattices*. Delivered at University of Central Florida, Analysis Seminar. (State)

Musslimani, Z. H. (2004). *Multiscale Asymptotic Analysis of Wave Propagating in Nonlinear Periodic Media*. Delivered at University of California, Irvine, Department of Mathematics. (National)

Musslimani, Z. H. (2003). *Wave Propagation in Continuous and Discrete Media*. Delivered at Florida State University, Department of Mathematics. (State)

Musslimani, Z. H. (2002). *Discrete Diffraction Managed Spatial Solitons*. Delivered at Colorado State University, Department of Mathematics. (National)

Musslimani, Z. H. (2002). *Continuous and Discrete Nonlinear Schrödinger Equation*. Delivered at Rutgers University, Department of Mathematics. (National)

Musslimani, Z. H. (2002). *Discrete Optical Spatial Solitons*. Delivered at Massachusetts Institute of Technology, Department of Mathematics. (National)

Musslimani, Z. H. (2002). *Numerical Methods for Discrete Solitons*. Delivered at University of California at Irvine, Department of Mathematics. (National)

Contracts and Grants

Contracts and Grants Funded

Musslimani, Ziad H. (PI). (Aug 2009–Jul 2013). *Wave propagation in linear and nonlinear parity-time (PT) optical media*. Funded by National Science Foundation, Division of Mathematical Sciences. (0908599). Total award \$195,250.

Erlebacher, Gordon (PI), Kopriva, D. A., Sussman, M. M., Wang, X., Horne, R. L., Musslimani, Z. H., & Cogan, N. G. (Jul 2007–Jul 2008). *SCREMS: High Performance Computing and Visualization*. Funded by National Science Foundation. (0724273). Total award \$114,678.

Musslimani, Z. H. (May 2006–Aug 2006). *Wave Propagation in Nonlinear Photonics Structures*. Funded by Council n Research & Creativity First Year Assistant Professor Awards. Total award \$15,000.

Contracts and Grants Denied

Musslimani, Z. H. (Nov 2014). *Integrable PT Symmetric Continuous and Discrete Nonlinear Models*, \$270,096.00. Submitted to National Science Foundation, Division of Mathematical Sciences.

Musslimani, Z. H. (Nov 2013). *Nonlinear PT Symmetric Waves*, \$320,887.00.

Musslimani, Z. H. (Nov 2012). *Modelling, Simulations and Analysis of Invisibility and Cloaking in Complex Media*, \$293,630.00. Submitted to National Science Foundation.

Citations ISI Web of knowledge - Thomson Reuters PA

Musslimani, Z. H. (2015). 2425 total number of citations.

Service

Florida State University

FSU University Service

Subcommittee Chair, Graduate Policy Committee on GFDI (2015–present).

FSU Department Service

Member, Applied Mathematics Graduate Student Hiring Committee (2012–2013).

Member, Applied Mathematics Colloquium Committee (2011–2013).

Member, Applied Mathematics Faculty Hiring Committee (2011–2013).

Member, Graduate Student Ph.D. Prospective Exam Committee (2010–2013).

Member, Applied Mathematics Qualifying Exams Committee (2009–2013).

The Profession

Chair of a Symposium

Muslimani, Z. H. (Chair). (2013). *Waves in disordered media*. Symposium conducted at the meeting of IMACS, Athens, Georgia.

Reviewer or Panelist for Grant Applications

NSF - National Science Foundation (2010).