

Curriculum Vitae

Alexandru C. Tamasan

Department of Mathematics Phone: 407-823-2228
University of Central Florida Email: tamasan@math.ucf.edu
4000 Central Florida Blvd.
Orlando, Florida, 32816

Education

1997-2002: University of Washington, Seattle, Washington, Ph.D. Mathematics, 2002
1989-1993: Babeş-Bolyai University, Cluj-Napoca, Romania, Licen. Math., 1994
1993-1994: University of Edinburgh, Edinburgh, UK

Employment

Aug 2016 - date: Professor, University of Central Florida
Aug 2010 - Jul 2016: Associate Professor, University of Central Florida
Aug 2005 - Jul 2010: Assistant Professor, University of Central Florida
Sep 2002- Jun 2005: Postdoctoral Fellow, University of Toronto

Visiting Fellowships

Schrödinger Inst. Math. Phys., Vienna, Austria, May 2014
Fields Inst. Res. Math. Sci., Toronto, Canada, Jan - May, 2012
Newton Inst. Math. Sci., Cambridge, UK, Sep - Nov, 2011
Inst. Pure Appl. Math., UCLA, Los Angeles, California, Sep - Dec, 2003
Lawrence Livermore Nat'l Lab., Livermore, California, Jun - Aug, 1999

Research Interest:

Inverse Problems, Partial Differential Equations, Integral Geometry, Applied Harmonic Analysis

Honors and Awards

- *Japan Society for Computational Mathematics Best Paper Award:*
Fujiwara H., Oishi N., Sadiq K. and Tamasan A., *Numerical computation of X-ray computerized tomography from partial measurement*, JASCOME **24**(12)(2021), 05-211218, 7pp.
- *Inverse Problems 2007 Editorial Highlights:*
Nachman A., Tamasan A. and Timonov A., *Conductivity imaging with a single measurement of boundary and interior data*, Inverse Problems **23** (2007), 2551–2563
- *Mc Farlan Scholarship:* University of Washington, Seattle, Washington, 2001-2002
- *Mc Farlan Scholarship:* University of Washington, Seattle, Washington, 1999-2000
- *EEC-TEMPUS Scholarship:* University of Edinburgh, Edinburgh, UK, 1993-1994

Funding

Title: *Analytical and computational approaches for quantitative tomography of tissue*
Source: NSF-DMS # 1907097
Award: Standard grant (200K)
Date: 2019 - 2023
Role: single-PI (100%)

Title: *Unconstrained natural-light coherency vector-field-imaging exploiting randomness*
Source: DARPA-BAA-15-44
Award: Research grant (1.15M)
Dates: 2016 - 2018
Role: co-PI (12.6%) with A. Abouraddy, G. Atia, and A. Dogariu

Title: *Current density impedance Imaging from minimal Interior data*
Source: NSF-DMS # 1312883
Award: Standard grant (158K)
Date: 2013- 2016
Role: single-PI (100%)

Title: *Current density based electrical impedance tomography, an emerging hybrid imaging method*
Source: NSF-DMS # 10905799
Award: Standard grant (149K)
Dates: 2009- 2012
Role: single-PI (100%)

Title: *Computational analysis of inverse problems*
Source: NSF-DMS # 1312644
Award: Conference grant (26K)
Dates: 2013- 2014
Role: co-PI(25%) with Q. Sun, J. Yong, and Y. Qi

Publications

Refereed Articles

1. Fujiwara H., Sadiq K. and Tamasan A., *Numerical reconstruction of radiative sources from partial boundary measurements*, SIAM J. Imaging Sci., accepted 2022.
2. Sadiq K. and Tamasan A., *On the range of the X-ray transform of symmetric tensors compactly supported in the plane*, Inverse Probl. Imaging, 2022. Doi: 10.3934/ipi.2022070
3. Fujiwara H., Sadiq K. and Tamasan A., *Partial inversion of the 2D attenuated X-ray transform with data on an arc*, Inverse Probl. Imaging **16**(2022), 215–228
4. Fujiwara H., Sadiq K. and Tamasan A., *A source reconstruction method in two dimensional radiative transport using boundary data measured on an arc*, Inverse Problems **37**(2021), 115005, 19 pp.
5. Fujiwara H., Oishi N., Sadiq K. and Tamasan A., *Numerical computation of X-ray computerized tomography from partial measurement*, JASCOME **24**(12)(2021), 05-211218, 7pp.

6. Fujiwara H., Sadiq K. and Tamasan A., *Numerical reconstruction of radiative sources in an absorbing and non-diffusing scattering medium in two dimensions*, SIAM J. Imaging Sci. **13**(2020), 535–555
7. Tamasan A. and Timonov A., *The method of regularized successive iterations for coupled physics conductivity imaging from a single internal data*, Appl. Numer. Math. **147**(2020), 19–30
8. Fujiwara H., Sadiq K. and Tamasan A., *A Fourier approach to the inverse source problem in an absorbing and anisotropic scattering medium*, Inverse Problems **36**(1)(2020), 015005, 33 pp.
9. Beckus A., Tamasan A. and Atia G., *Multi-modal non-line-of-sight passive imaging*, IEEE Trans. Imag. Proc. **28**(7)(2019), 3372–3382
10. Tamasan A. and Timonov A., *A regularized weighted least gradient problem for conductivity imaging*, Inverse Problems **35**(2019), 045006, 20 pp.
11. Fujiwara H. and Tamasan A., *Numerical realization of a new generation tomography algorithm based on the Cauchy-type integral formula*, Adv. Math. Sci. Appl. **28**(2)(2019), 413–424
12. Moradifam, A., Nachman A., and Tamasan A., *Uniqueness of minimizers of weighted least gradient problems arising in hybrid inverse problems*, Calc. Var. Partial Differential Equations **57**(1)(2018), 14 pp.
13. Beckus A., Tamasan A., Dogariu A., Abouraddy A.F., and Atia G.K., *On the inverse problem of source reconstruction from coherence measurements*, J. Opt. Soc. Am. A **35**(6)(2018), 959–968
14. Montalto C. and Tamasan A., *Stability in conductivity imaging from partial measurements of one interior current*, Inverse Probl. Imaging **11**(2)(2017), 339–353.
15. Beckus A., Tamasan A., Dogariu A., Abouraddy A.F., and Atia G.K., *Spatial coherence of fields from generalized sources in the Fresnel regime*, J. Opt. Soc. Am. A **34**(2017), 2213–2221
16. Sukhov S., Batarseh M., Naraghi R.R., Gemar H., Tamasan A., and Dogariu A., *Babinet principle for mutual intensity*, Opt. Lett. **42**(2017), 3980–3983
17. Nachman A., Tamasan A. and Veras J., *A weighted minimum gradient problem with complete electrode model boundary conditions for conductivity imaging*, SIAM J. Appl. Math. **76** (2016), 3121–1343
18. Sadiq K., Scherzer O. and Tamasan A., *The X-ray transform of planar symmetric two tensors*, J. Math. Anal. Appl. **442** (2016), 31–49
19. Kim S. and Tamasan A., *A Calderón Problem with Frequency Differential Data in Dispersive Media*, Proc. Amer. Math. Soc. **144** (2016), no. 3, 1265–1276
20. Sadiq K. and Tamasan A., *On the range of the attenuated Radon transform in strictly convex sets*, Trans. Amer. Math. Soc. **367** (8)(2015), 5375–5398
21. Sadiq K. and Tamasan A., *On the Range Characterization of the two dimensional Doppler transform*, SIAM J. Math. Anal. **47**(3) (2015), 2001–2021

22. Tamasan A., Timonov A., and Veras J., *Stable reconstruction of regular 1-Harmonic maps with a given trace at the boundary*, Appl. Anal. **94** (6)(2015), 1098–1115.
23. Kim S. and Tamasan A., *Reconstructing small perturbations in electrical admittivity at low frequencies*, Inverse Problems **30** (3)(2014), 035006, 18 pp.
24. Spradlin G. and Tamasan A., *Not all functions on the circle are traces of functions of minimum gradient in the disc*, Indiana Univ. Math. J. **63**(6) (2014), 1819–1837
25. Tamasan A. and Timonov A., *Coupled physics electrical conductivity imaging*, Eurasian J. Math. Comp. Appl. **2** (2014), 5–29
26. Kim S. and Tamasan A., *On a Calderón problem in frequency differential electrical impedance tomography*, SIAM J. Math. Anal. **45**(5) (2013), 2700–2709
27. Kim S. and Tamasan A., *EIT image reconstruction using the imaginary part of the complex potential*, Proc. Korean SIAM **8**(1)(2013), 61–65
28. Moradifam A., Nachman A., and Tamasan A., *Conductivity imaging in the presence of perfectly conducting and insulating inclusions from one interior measurement*, SIAM J. Math. Anal. **44** (2012), no. 6, 3969–3990
29. Tamasan A. and Veras J., *Conductivity imaging by the method of characteristics in the 1-Laplacian*, Inverse Problems **28**(2012), 084006
30. Nashed M. Z. and Tamasan A., *Structural stability in a minimization problem and applications to conductivity imaging*, Inverse Probl. Imaging **5**(2011), 219–236.
31. McDowall S., Stefanov P. and Tamasan A., *Stability of the gauge equivalent classes in inverse stationary transport in refractive media*, in Tomography and Inverse Transport Theory, Contemp. Math. **559**, pp. 85–100, AMS, Providence, RI, 2011
32. McDowall S., Stefanov P. and Tamasan A., *Stability of the gauge equivalent classes in inverse stationary transport*, Inverse Problems **26**(2010), 025006, 19 pp
33. Nachman A., Tamasan A. and Timonov A., *Reconstruction of planar conductivities in subdomains from incomplete data*, SIAM J. Appl. Math. **70** (2010), 3342–3362.
34. McDowall S., Stefanov P., and Tamasan A., *Gauge equivalence in stationary radiative transport through media with varying index of refraction*, Inverse Problems and Imaging **4** (2010), 151–167
35. Nachman A., Tamasan A. and Timonov A., *Recovering the conductivity from a single measurement of interior data*, Inverse Problems **25**(2009) 035014 (16 pp)
36. Stefanov P. and Tamasan A., *Uniqueness and non-uniqueness in inverse radiative transfer*, Proc. Amer. Math. Soc. **137** (2009), 2335–2344
37. Tamasan A. and Timonov A., *On a new approach to frequency sounding of layered media*, Num. Funct. Anal. Optim. **29**(2008), 470–486
38. Nachman A., Tamasan A. and Timonov A., *Conductivity imaging with a single measurement of boundary and interior data*, Inverse Problems **23**(2007), 2551–2563

39. Tamasan A., *Tomographic reconstruction of vector fields in variable background media*, Inverse Problems **23**(2007), 2197-2225
40. Bal G. and Tamasan A., *Inverse source problems in transport equation*, SIAM J. Math. Anal. **39**(2007), 57-76
41. Tamasan A. *On the scattering method for $\bar{\partial}$ - equations and reconstruction of convection coefficients*, Inverse Problems **20**(2004), 1807-1817
42. Knudsen K. and Tamasan A., *Reconstruction of less regular conductivities in the plane*, Commun. Partial Diff. Eq. **29**(2004), 261-281
43. Tamasan A., *Optical tomography in weakly anisotropic scattering media* in Inverse problems: theory and applications, Contemp. Math. **333**, pp. 199–207, AMS, Providence, RI, 2003.
44. Tamasan A., *An inverse boundary value problem in 2D transport*, Inverse Problems **18**(2002), 209–219
45. Tamasan A., *Differentiability with respect to the lag for nonlinear pantograph equation*, Pure Math. Appl. **9** (1998), 205–220.
46. Gheorghiu C. and Tamasan A., *On the bifurcation of the null solutions of some boundary value problems*, An. Ştiinţ. Univ. Ovidius Constanţa Ser. Mat. **5**(1997), 59–64.
47. Tamasan A., *Extremal solutions for the discontinuous delay-equations*, Studia Univ. Babeş-Bolyai Math. **41**(1996), 107–112.
48. Gheorghiu C. and Tamasan A., *On the existence and uniqueness of positive solutions of some mildly nonlinear elliptic boundary value problems*, Rev. Anal. Numér. Théor. Approx. **24**(1995), 125–129.
49. Sacarea C. and Tamasan A., *On some nonlinear Volterra integral equations*, Seminar on Fixed Point Theory, 45–49, Preprint 92-3, Babeş-Bolyai Univ., Cluj-Napoca, 1992

Refereed Proceedings

50. Fujiwara H., Sadiq K. and Tamasan A., *The algebraic range of the planar X-ray transform of symmetric tensors and applications to noise reduction*, Practical inverse problems and their prospects, Mathematics for Industry, Springer, 22 pp., accepted 2022
51. Fujiwara H., Sadiq K. and Tamasan A., *On a local inversion of the X-ray transform from one sided data*, RIMS Kokyuroku 2186 (2021), 23–27
52. Dogariu A., Abourady A., Tamasan A. and Atia G., *On Scene Reconstruction from Spatial Coherence Measurements*, Imaging and Applied Optics 2018, OSA 2018, MTu2D.3
53. Beckus A., Tamasan A., Shen Z., Sukhov S., Dogariu A. and Atia G., *Passive Non-line-of-sight Source Classification from Coherence Measurements*, Computational Optical Sensing and Imaging 2018, OSA 2018, CM2E.5
54. Batarseh M., Sukhov S., Naraghi R. R., Germar H., Tamasan A. and Dogariu A., *Babinet Principle for Partially Coherent Fields*, Frontiers in Optics 2017, OSA 2017, JTU2A.106.

55. Tamasan A., *On current density based impedance imaging from minimal data* in Mathematical Backgrounds and Future Progress of Practical Inverse Problems, Math. Ind. Research **5**, pp. 145–162, IMI Publ., Kyushu University, Fukuoka, Japan, 2016
56. Nachman A., Tamasan A. and Timonov A., *Current density impedance imaging*, in Tomography and Inverse Transport Theory, Contemp. Math. **559**, pp. 135–149, AMS, Providence, RI, 2011

Invited Talks at Conferences and Workshops

1. Tomography across scales, workshop on *Geometrical Inverse Problems*, Radon Inst. Comp. Appl. Math., Linz, Austria, Oct 2022
2. SIAM Conference in Imaging Sciences (IS22), minisymposium *Wave based imaging in Complex Media*, virtual, Mar 2022
3. Conference on Practical Inverse Problems and their prospects, IMI, Kyushu Univ., virtual, Mar 2022
4. Days on Diffraction Conference, minisymposium on *Inverse Problems*, Steklov Inst., virtual, Jun 2021
5. RIMS Workshop, *Recent developments on inverse problems for partial differential equations and their applications*, Kyoto University, virtual, Jan 2021
6. SIAM Conference on Imaging Science (IS20), minisymposium *Advances in Image Reconstruction Algorithms for Tomographic Problems*, virtual, Jul 2020
7. Applied Inverse Problems Conference, minisymposium *Inverse Problems and the work of Joyce McLaughlin*, Grenoble, France, Jul 2019
8. The 9th Congress of Romanian Mathematicians, Galați, Romania, Jun 2019
9. Joint Mathematics Meeting, AMS Special Session on *Recent Advances in Inverse Problems and Imaging*, Baltimore, MD, Jan 2019
10. Joint Mathematics Meeting, AMS Special Session on *Interactions of Inverse Problems, Signal Processing, and Imaging*, San Diego, CA, Jan 2018
11. 100 Years of Radon Transform, RICAM, Linz, Austria, Mar 2017
12. DARPA-Conference, Orlando, FL, Mar 2017 (by invitation only)
13. Joint AMS-MAA Meeting 2017, AMS Special Session on Inverse Problems and Multivariate Signal Analysis, Atlanta, GA, Jan 2017.
14. SIAM Conference on Imaging Science IS16, minisymposium on Recent Developments in Hybrid Inverse Problems and Imaging, Albuquerque, NM, May 2016
15. Mathematical sciences in the background of practical inverse problems and their new development, Kyushu Univ., Fukuoka, Japan, Nov 2015 (Keynote Speaker)

16. BIRS workshop on Hybrid Methods in Imaging, Banff, Alberta, Canada, Jun 2015 (by invitation only)
17. 1108-th AMS Meeting, Special session on Inverse Problems and Imaging, East Lansing, Michigan, Mar 2015
18. Inverse Problems and Analysis seminar, Dept. of Math. Sci., Univ. Delaware, Newark, Oct 2014
19. 10-th Joint Conference on Mathematics and Computer Science, Cluj-Napoca, Romania, May 2014
20. Workshop on Theoretical and Applied Computational Inverse Problems, E. Schrödinger Institute, Vienna, Austria, May 2014
21. 1098-th AMS Meeting, Special session on Novel Developments in Tomography and Applications, Baltimore, Maryland, Mar 2014
22. CMS Winter Meeting, Session on Inverse Problems in Imaging, Ottawa, Canada, Dec 2013
23. BIRS workshop on Geometry and Inverse Problems, Banff, Alberta, Canada, Sep 2013 (by invitation only)
24. Applied Inverse Problems Conference, Minisymposium on Hybrid Inverse Problems, KAIST, Daejeon, Korea, Jul 2013
25. The 10th International Conference on Fixed Point Theory and Its Applications, Cluj-Napoca, Romania, Jul 2012
26. Inverse Problems Conference in honor of Gunther Uhlmann, Irvine, CA, Jun 2012 (by invitation only)
27. SIAM Conference in Imaging Sciences, Session on Novel Tomographic Imaging Techniques in Medicine, Philadelphia, PA, May 2012
28. Workshop on Inverse Problems, Isaac Newton Institute, Cambridge, UK, Oct 2011
29. ICIAM, Minisymposium on Composites and Inversion: Asymptotic and Computational Methods, Vancouver, Canada, Jul 2011
30. CMS Summer Meeting, session on Inverse Problems in PDE, Fredericton, New Brunswick, Canada, Jun 2010
31. BIRS workshop on Inverse Transport Theory and Tomography, Banff, Alberta, Canada, May 2010
32. Joint AMS-MAA Meeting, AMS Special session on Inverse Problems: Analysis and Computations, San Francisco, California, Jan 2010
33. SIAM Conference on Analysis of PDE, Session on Inverse Problems for PDE, Miami, Florida, Dec 2009
34. 1053rd AMS meeting, Boca Raton, Florida, Nov 2009

35. Joint AMS-MAA Meeting, AMS Session on Non-smooth Analysis in Inverse and Variational Problems, Washington DC, Jan 2009
36. Inverse Problems: Recent Progress and New Challenges, BIRS, Banff, Alberta, Canada, Nov 2008
37. SIAM Conference in Life Sciences, Session on Innovative MR Techniques, Montreal, Quebec, Canada, Aug 2008
38. Summer school in Radiative Transfer, Univ. of California at Merced, Merced, California, Jun 2008
39. SIAM 32nd Southeastern-Atlantic Section Conference, Session on Wave Propagation and Tomography, Orlando, Florida, March 2008.
40. Joint AMS-MAA Meeting, AMS Session on Non-smooth Analysis in Inverse and Variational Problems, Washington DC, Jan 2008.
41. International Conference on Nonlinear Operators, Differential Equations, and Applications, Cluj-Napoca, Romania, Jul 2007.
42. 1027th AMS Meeting, Session on Inverse Problems for Wave Propagation, Tucson, Arizona, Apr 2007.
43. Joint AMS-MAA Meeting, AMS Session on Non-smooth Analysis in Inverse and Variational Problems, New Orleans, Louisiana, Jan 2007.
44. Inverse Problems Reunion Conference, Lake Arrowhead, California, Jun 2006.
45. Young Mathematicians Conference, McMaster University, Hamilton, Ontario, Canada, Jan 2005.
46. Perspectives in Inverse Problems, Helsinki, Finland, Jun 2004.
47. Shape Optimization and Applications Workshop, University of Ottawa, Canada, May 2004.
48. Opening Conference for Inverse Problems Center at Rensselaer Polytechnic Institute, Troy, New York, Apr 2004.
49. Inverse Problems Culminating Workshop at Lake Arrowhead, Lake Arrowhead, California, Dec 2003.
50. AMS Fall Eastern Sectional Meeting, Session on Inverse Problems and Tomography, SUNY at Binghamton, New York, Oct 2003
51. Workshop on Inverse problems in Medical Imaging, IPAM-UCLA, Los Angeles, Oct 2003.
52. Scattering and Inverse Scattering, Banff International Research Station, Banff, Alberta, Canada, Mar 2003.
53. Inverse Problems and Non-Linear Analysis, Pan-American Advanced Study Institute on Partial Differential Equations, Santiago, Chile, Jan 2003.
54. AMS-Unione Matematica Italiana Joint International Meeting, Session on Inverse Boundary Problems and Applications, Pisa, Italy, Jun 2002.

55. Istituto Nazionale di Alta Matematica, Cortona, Italy, Jun 2002.

Invited Colloquia and Seminars

- Mathematical Sciences Colloquium, Florida Institute of Technology, Melbourne, FL, Oct 2018
- Inverse Problems and Analysis Seminar, Dept. Math. Sci., University of Delaware, Newark, DE, Oct 2014
- Dept. of Mathematics Colloquium, Florida State University, Tallahassee, FL, Nov 2011
- Fields Institute Colloquium, Fields Institute, Toronto, Canada, Jun 2010
- Dept. of Mathematics, Purdue University, West Lafayette, IN, Mar2009
- Mathematics Seminar Series, Embry-Riddle University, Daytona Beach, FL, Oct 2008
- Analysis Seminar, Dept. of Mathematics, University of Central Florida, Orlando, Oct 2007.
- Department of Mathematics Colloquium, Babeş-Bolyai University, Cluj-Napoca, Romania, May 2006
- Department of Mathematics Colloquium, University of Alabama, Birmingham, AB, Jan 2005
- Department of Mathematics Colloquium, Western Washington University, Bellingham, WA, Jan 2005
- Department of Mathematics Colloquium, University of Rochester, Rochester, NY, Jan 2005
- Radon Seminar, Radon Institute for Computational and Applied Mathematics, Linz, Austria, Dec 2004
- Analysis Seminar, University of Rochester, Rochester, NY, Oct 2004
- Applied Mathematics Seminar, University of Toronto, Canada, Oct 2004
- York Analysis Seminar, York University, Toronto, Oct 2004
- Joint Inverse Problems and Differential Geometry/PDE Seminar, University of Washington, Seattle, WA, Jul 2004
- Analysis Seminar, Babeş-Bolyai University, Cluj-Napoca, Romania, Jun 2004
- Fields Institute Seminar in PDE, Fields Institute, Toronto, Mar 2004
- Analysis and PDE seminar, University of Delaware, Newark, Jan 2004
- Seminar in Inverse Problems, Inst. Pure Appl. Math.- Univ. Cal. Los Angeles, Oct 2003
- Applied Mathematics Seminar, University of Ottawa, Ottawa Apr2003
- Applied Mathematics Seminar, University of Toronto, Toronto, Oct 2002

Teaching

Ph.D. student advising

- *Anastasios Dimitriadis*, since 2021
- *Kamran Sadiq*: Ph.D. 2014, currently Researcher at Radon Inst. Comp. Appl. Math., Linz, Austria
- *Johann Veras*: Ph.D. 2014, currently Senior Engineer at Lockheed Martin Co., Orlando, Florida

Other graduate student advising

- *Andre Beckus*: Ph.D. Electrical Engineering 2020, (co-supervised with G. Atia)
- *Tyler Gomez*: Ph.D. 2016, (co-supervised with J. Swanson)

Undergraduate student advising and supervised publication

- *Jade Vanadium*, Summer 2018
- *Johann Veras*, REU-student, Summer 2009
- *Chastity Aiken*, REU-student, Summer 2009
- Aiken, C. and Veras, J., *An inverse source problem in near zero frequency sounding of layered media*, Fixed Point Theory **13**(1)(2012), 11–21.

Courses taught at the University of Central Florida

Undergraduate:

Calculus I (MAC 2311)
Calculus II (MAC 2312)
Calculus III (MAC 2313)
Honors Calculus I (MAC 2311H)
Honors Calculus II (MAC 2312H)
Honors Calculus III (MAC 2313H)
Differential Equations (MAP2302)
Logic and Proof (MHF 3302)
Advanced Calculus (MAA 4226)
Advanced Calculus II (MAA 4227)
Applied Complex Variables (MAP4307)
Intro Partial Differential Equations (MAP4341)
Mathematical Modeling (MAP 4103)

Graduate:

Partial Differential Equations (MAP 6356)
Transform Methods (MAP6424)
Advanced Transform Methods (MAP6419)
Complex Variables (MAA6405)
Complex Analysis (MAA6404)
Ordinary Differential Equations (MAP 5336)
Advanced Partial Differential Equations (MAP 7359)

Teaching at the University of Toronto: Linear algebra and differential equations, Calculus for Engineers, Introduction to Differential Geometry (all undergraduate)

Service

Meetings co-organization

- *New computational and analytic hybrid methods in the tomography of diffusive media*, Minisymposium at Applied Inverse Problems Conference, Grenoble, France, Jul 2019
- *Analytical Techniques in Imaging Electrical Properties of Tissue in Coupled Physics Models*, SIAM minisymposium within JMM19, Baltimore, MD, Jan 2019
- Scientific committee, PICOF 2018, Inverse Problems, Control and Shape Optimization, Beirut, Lebanon, Jun 2018
- *Recent Developments in Integral Geometry and Tomography*, AMS Eastern Sectional Meeting, Orlando, FL, Sep 2017
- *Imaging methods in coupled physics models*, 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, FL, Jul 2016
- *Florida Day in Inverse Problems and Imaging*, Univ. of Central Florida, Orlando, Florida, Feb 2016
- *Novel developments in Tomography and Applications*, Spring AMS Eastern Sectional Meeting, Univ. of Maryland, Baltimore, MD, Mar 2014
- *Computational Analysis of Inverse problems and PDE*, University of Central Florida, Orlando, Florida, May 2013
- *Recent progress in MR-based electrical property imaging techniques*, Minisymposium at Applied Inverse Problems Conference, KAIST, Daejeon, Korea, Jul 2013.
- 9th AIMS International Conference, Orlando, Jul 2012
- *Variational and PDE Methods in Imaging Science*, SIAM minisymposium at Joint AMS-MAA Mathematical Meeting, Boston, Jan 2012
- *Hybrid Methods in Medical Imaging*, Minisymposium at ICIAM 2011, Vancouver, BC, Canada, Jul 2011
- *Imaging Electric Properties of Tissues*, Minisymposium at Mathematics of Medical Imaging Conference, Fields Institute, Toronto, Canada, Jun 2011.
- *Non-smooth Optimization in Inverse Problems*, Minisymposium at Applied Inverse Problems Conference, Vienna, Austria, Jul 2009
- *Wave Propagations and Tomography*, SIAM Southeastern-Atlantic Conference, UCF, Orlando, Mar 2007

UCF Committee Activities

Department of Mathematics

- Promotion&Tenure Committee, 2010-present, Chair 2017–2019

- Colloquia, 2005-2007, and 2013- present, Chair 2014–2017
- Calculus Textbook Selection, Chair, 2013–2014,
- Calculus Syllabus, Chair, Spring 2014,
- Graduate Program, 2012 –2014, 2016-present
- BS Program Assesment, 2013–2015
- Equitable Workload, 2011–2012
- Steering Committee, 2010–2011, 2017–2018
- Qualifying Exams Committee, 2007 – 2009,
- Candidacy Exam Committee for ODE& PDE, 2011-present
- Ph.D. Committee:
 - *T. Nasciamento* (COS/Math), Ph.D. 2023 (expected)
 - *J. Blackstone* (COS/Math), Ph.D. 2019
 - *T. Gomez* (COS/Math), Ph.D. 2017
 - *R. Krylov* (COS/Math), Ph.D. 2014,
- M.S. Committee: *J. Dickerson* (COS/Math), M.S. 2013

College/University

- College Promotion and Tenure, 2021-date
- Dean’s Advisory, 2018-2019
- Sabbatical Committee, 2016–2017
- Faculty Senator, 2012 –2014
- Faculty Senate Parking Committee, Chair 2012–2013
- co-leader of a cluster faculty hiring proposal, 2014
- University Parking and Traffic Advisory Committee, 2012–2013
- Ph.D. Committee:
 - *M. Batarseh* CREOL, Ph.D. 2021
 - *S. Zhean*, CREOL, Ph.D. 2020
 - *A. Beckus*, ECE, Ph.D. 2020
 - *R. Naraghi*, CREOL, Ph.D. 2017
 - *J. Broky*, CREOL, Ph.D. 2013,
 - *T. Kohlgraph* CREOL, Ph.D. 2013