

Curriculum Vitae of
Peter G. Casazza
Department of Mathematics
University of Missouri
Columbia, MO 65211

(573) 882-8285 (office)
email: Casazzap@missouri.edu

Education

B.S. St. Lawrence University, Canton, N.Y., 1967. Major: Mathematics; Minor: Physics & Chemistry.

M.S. The University of Iowa, Iowa City, Iowa, August, 1970.

Ph.D. The University of Iowa, Iowa City, Iowa, 1972.

Professional Experience

Director: The Frame Research Center, www.framerc.org. 2005–present.

Curators' Professor, University of Missouri, 2011–present.

Professor of Mathematics, University of Missouri, 1983–present. Luther Marion Defoe Distinguished Professor of Mathematics 1987–1990, 2000–2011.

Associate Professor of Mathematics, University of Alabama (Tuskaloosa), 1980–1983.

Assistant/Associate Professor of Mathematics, University of Alabama (Huntsville), 1972–1980.

Chairman, Department of Mathematics, University of Alabama (Huntsville), 1974–1977.

National Academy of Science Fellow to the U.S.S.R., 1977–1978.

Research Fellow, Danish Natural Sciences Research Foundation, Odense, Denmark, 1995.

Visiting Scholar: Hebrew University of Jerusalem (1985–1986); Odense University, Denmark (1987); University of Cambridge, England (1989–91).

Scientific Advisory Board

Member of the Scientific Advisory Board of the Acoustics Research Institute, Vienna, Austria.

NSF Award

In their annual report for 2013 featuring the most significant research supported by NSF, two different sections of NSF featured the research of Casazza. The Applied Math Section of DMS reported Pete Casazza's work on Phase Retrieval (an area of research introduced by Pete, Radu Balan and Dan Edidin) and its applications to x-ray crystallography, electron microscopy, diffractive imaging, astronomical imaging, x-ray tomography etc. NSF ATD (Algorithms for Threat Detection) is reporting Pete's work on Fusion Frames

(an area of research introduced by Pete and Gitta Kutyniok) and their applications to distributed processing and the design of wireless sensor networks for detecting Chemical, Biological weapons.

Scientific Advisory Board

As of 2014 I am a member of the Scientific Advisory Board of the Austrian Academy of Science's *Acoustical Research Institute*.

Teaching Awards

2009 Disability Services Faculty Appreciation Award

2004 Student Athlete's "Most Inspiring Professor" Award

1997 \$10,000 Campus-wide William T. Kemper Excellence in Teaching Award

1997 Outstanding Greek Faculty Award

Memberships

AMS, MAA, SIAM, SPIE.

Areas of Interest

I work on applications of Hilbert space frames to problems in pure mathematics, applied mathematics and engineering.

Research Grants: We give specifics on current grants

NSF (Analysis Section) 1980-2001.

NSF (Applied Math Section) 2001-2014.

NSF (Bundled grant from Applied Mathematics, Computational Mathematics and Digital Signal Processing) 2007-2011. NSF DMS 0704216, P.I.: Casazza, *Applications of frames to speech recognition, distributed processing, bio-medical engineering and more.*

NSF DMS Applied Mathematics Section 2010-2013, NSF DMS 1008183, P.I. Casazza, *Applications of frames to problems in mathematics and engineering.*

NSF Applied Mathematics Section 2013 - 2016, NSF DMS Applied Mathematics 1307685, P.I.: Casazza, *Applications of frames to problems in mathematics and engineering II.*

NSF ATD (Algorithms for Threat Detection) NSF ATD: 1042701 PI: Casazza, *Frame theoretic information fusion for threat detection.* 9/1/2010 - 8/31/2014.

NSF ATD (Algorithms for Threat Detection) NSF ATD 00040683 PI: Casazza, *Frame Theoretic Algorithms for Smart Sensing.* 9/1/2013 - 8/31/16.

AFOSR AFOSR F1ATA00183G003: *Frames and Quantitative Redundancy.* PI: Fickus (Air Force Institute of Technology) Subcontractor: Casazza. 8/1/2010 - 7/31/2011.

AFOSR FA9550-11-1-0245, PI: Casazza 8/15/2011-8/14/2014. ” Frames in Compressive Sensing and Approximate Signal Recovery Pertaining to Physical Sensing Matrices”.

Grants to host meetings:

AIM Squares Program. Awarded 1/1/2008. This is to run 3 years and provides 100% funding for five mathematicians to meet at AIM each year to work on the Kadison-Singer Problem.

NSF (1994) “The Interaction between Functional Analysis, Harmonic Analysis and Probability Theory” (with N.J. Kalton).

International Science Foundation (1994).

Missouri Research Board (1994).

Editorships

Associate Editor *Journal of Fourier Analysis and Applications* 2008 - present.

“Critical Points”: Newsletter of the Department of Mathematics, University of Missouri, 1996-2001. I also started the newsletter.

Current Students

Rick Lynch,(current) PhD Advisor.

Lindsey Woodland (current) PhD Advisor.

Eric Pinkham (current) PhD Advisor.

Captain Travis Bemrose PhD Advisor

Saeid Bahmenpour PhD Advisor

Graduated Students

Mark Lammers, PhD advisor, PhD received 1997.

Nicole Leonhard, MS Thesis advisor, MS received 2006.

Dan Redmond, PhD advisor, PhD received 2009.

Ihar Smalyanau, MS thesis advisor, MS received 2011.

Steve Senger, Directed his research for two years and wrote two papers with him (PhD 2011). His regular advisor is A. Iosevich.

Andreas heinecke, PhD advisor, PhD received 2012.

Jameson Cahill, (current) PhD advisor, PhD received 2013.

Jess Peterson, (current) PhD advisor, PhD received 2013.

I was on the Masters and PhD committees for many students which I will not list here.

Other Professional Service

2004-2005, Vice President, Missouri MAA.

1983-present, High School/College Lecturer for MAA.

Service - Some Highlights

I have been on most departmental committees and many university committees. I will just single out here:

1992-present, Excellence in Teaching Committee (Chair last two years).

1996-2007, Business Calculus Coordinator.

I chaired the committee which wrote the by-laws for this department.

I chaired the committee which wrote the charter for the Executive Committee.

I Chaired the committee which wrote our faculty evaluation system.

I started and ran for several years our newsletter. E. Saab and I used this to generate well over \$1 million in endowments for the department.

Meetings Organized - last 4 years

B. Bodmann, P.G. Casazza, D. Spielman and A. Marcus, AIM - a week long meeting on the solution to the Kadison-Singer Problem, November 30 - December 5, 2014.

BiAnnual SAMPTA conference, Jacobs University, Germany. Organizing a special Session of frames. Other organizers Gitta Kutyniok (Einstein Chair, Technical University of Berlin), Matt Fickus (Air Force Institute of Technology), Bernhard Bodmann (University of Houston) July 1-5, 2013.

BiAnnual SPIE meeting, San Diego, CA. Organizing a special session on frames and their applications. Other organizers: Matt Fickus (Air Force Institute of Technology), Bernhard Bodmann (University of Houston), Radu Balan (University of Maryland). August 25-29, 2013.

Organizer with Matt Fickus of AFIT, special session on frames at SPIE (Society of Photo-Optical and Instrumentation Engineers) meeting, San Diego, August 21-25, 2011.

Organizer: AFOSR Confence on compressive sensing and frames: May 19, 2010, Washington, D.C.

BIRS March 15-20, 2009. "Frames from first principles: Error correction, symmetry goals, localization and sparseness" Organizers: G. Kutyniok, U. Osterbroek (Germany), Ozgur Yilmaz (U. of British Columbia), B. Bodmann (U. Houston), P.G. Casazza (MU), and V. Paulsen (U. Houston)

SPIE (Society of Photo-optical Instrumentation Engineers) August 2-6, 2009, San Diego. Organizing

two special sessions: "From frames to fusion frames" and "Frames and their Applications". Organizers: R. Balan (U. of Maryland), B. Bodmann (U. Houston), P.G. Casazza (MU), and G. Kutyniok (U. Osterbroek).

American Institute of Mathematics, 2008-2010. "The Kadison-Singer Problem". This is a 3-year program held in May each year.

SAMPTA (Sampling Theory and Applications) 2009. Organizing Committee.

Invited addresses (I have given 470 invited addresses in 27 countries. We list the last five years here)

2013

1. January 11, 2013: Talk at the SIAM minisymposium on "New Trends and Directions in Inverse Problems and Signal Processing" held at the joint mathematics meetings of the AMS and SIAM, San Diego, CA. Title of my talk: Algorithms for threat detection.
2. January 30, 2013: AFOSR program review in Arlington, VA. My presentation: Fusion frames and distributed processing.
3. February 20-25, 2013: Attended FFT and the Phaseless Conference at the University of Maryland.
4. July 20 - 22, 2013: Attended Ingrid Daubechies' birthday meeting at Duke University.
5. July 28 - August 3, 2013: Attended the AIM conference in Palo Alto, CA on *interactions between frames and geometry*.
6. August 10 - 16, 2013: Plenary address at the CIMPA conference in Mar del Platta, Argentina. Title: The Kadison-Singer Problem in Mathematics and Engineering.
7. August 29 - September 1, 2013. Attended the SPIE conference in San Diego, CA. Ran a special session on frames and their applications.
8. September 17 - 19, 2013: Colloquium at Yale University. Title: The Kadison-Singer Problem in Mathematics and Engineering.
9. October 7 - 12, 2013: Attended the Frames and Bases conference at the University of Bordeaux, France. Gave two plenary addresses on: The Kadison-Singer Problem in Mathematics and Engineering.
10. October 12 - 18, 2013: Gave a *Master Course* on the Kadison-Singer Problem at the University of Copenhagen. This consisted of 6 one hour lectures.
11. October 18 - 20, 2013: Lecture in the special session on frames and wavelets at the sectional meeting of the AMS held at Washington University, St. Louis. Title: Phase retrieval by projections.
12. October 22, 2013: Colloquium, Math Dept. of MU: The Kadison-Singer Problem in mathematics and engineering.
13. November 7, 2013: Colloquium, Engineering School, Title: Fusion frames and their applications.
14. December 9-13, 2013: AFOSR Program Review, Arlington, VA. 40 minute talk. Title: Phase Retrieval by Projections.

2012

1. January 23-28, 2012. AFOSR program review, Arlington, VA. My presentation: Fusion frames and sensor networks.
2. March 25, 2012. Talk (30 min) in a special session of the SIAM meeting at the University of Alabama - Huntsville. My session: Applied and Computational Harmonic Analysis. Title: Necessary and sufficient conditions for spectral tetris.
3. April 6, 2012. Colloquium at Virginia Commonwealth University. Title: Algorithms for Threat Detection.
4. April 11, 2012. Seminar Talk at Vanderbilt University. Title: Algorithms for Threat Detection.
5. June 12, 2012. Plenary address at an Oberwolfach Conference on Compressed Sensing and Applied Harmonic Analysis. Title: Sensor Networks and Fusion Frames.
6. July 21, 2012. Plenary Address at the 70th birthday party for David Larson at Texas A&M University, part of the Workshop in Analysis and Probability, entitled *Operator Algebras, Frames and Undergraduate Research*. Title: Algorithms for Threat Detection.
7. August 4, 2012. Plenary Address at the SUMIRFAS meeting at Texas A&M University. Title: *The Kadison-Singer Problem in Mathematics and Engineering*.

2011

1. January 2 - 13, 2011. Visited the Air Force Institute of Technology, Dayton, Ohio to attend the AFOSR program review. Talk: Redundancy for frames.
2. March 8, 2011. Hour address at the Banff International Research Station, Banff, Canada. Title: Sparse tight frames.
3. March 23, 2011. Seminar talk, Jacobs University, Germany. Title: Spectral tetris constructions in frame theory.
4. March 28, 2011. Hour address at the Oberwolfach Conference on frames, wavelets and fractals. Title: Operators and frames.
5. April 23, 2011. Colloquium at UC Davis. Title: The kadison-Singer Problem in Mathematics and Engineering.
6. May 17, 2011. Talk in the special session on frames at the *Shanks Conference*, Vanderbilt University. Title: Non-orthogonal fusion frames.
7. June 8, 2011. Hour presentation at the DTRA/NSF Algorithms for Threat Detection program review. Title: Frame theoretic algorithms for threat detection.
8. June 15, 2011. Plenary address at the Strobl Conference, Austria honoring Hans Feichtinger's 60th-birthday. Title: An update on the Feichtinger Conjecture.

2010

1. January 17, 2010, talk in a special session of the AMS: Optimal frames and operator theory. Title: Spanning and independence properties of frames
2. January 18, 2010, talk in a workshop at San Francisco State University. Title: Optimal frames.

3. February 4, 2010, Seminar talk at University of Osnabrueck, Germany. Title: Signal reconstruction without phase.
4. February 15, 2010, Colloquium at Jacobs University, Germany. Title: Industrial Applications of Hilbert space frames.
5. March 3, 2010, Seminar Talk at University of Oklahoma. Title: The Kadison-Singer Problem in Mathematics and Engineering.
6. March 4, 2010, Colloquium at University of Oklahoma. Title: Applications of Hilbert space frames.
7. March 19, 2010. Invited address in the special session on frames at the CISS meeting at Princeton U. Title: A new notion of redundancy for finite frames.
8. March 21, 2010. Plenary address at the retirement meeting for Joe Diestel, Kent State University. Title: The Kadison-Singer Problem in Mathematics and Engineering.
9. April 11, 2010. Talk in the special session on frames at the regional AMS meeting at McCalister College, MN. Title: Kadison-Singer meets Digital Signal Processing.
10. April 24-26, 2010. Seminar talk at the Air Force Institute of Technology to the Threat Detection Group on: "Fusion frames and threat detection".
11. May 10 - 14, 2010: Talk at an AIM meeting, Palo Alto, CA: "The Spielman Algorithm".
12. May 19, 2010. Talk at the AFOSR workshop on frames and compressed sensing, Washington, D.C. Title: Fusion Frames for Threat Detection.
13. May 20-22, 2010. My birthday conference at the University of Maryland. My talk was at the banquet.
14. June 20-24, 2010. Talk at the "Algorithms for Threat Deception" workshop in Rayleigh, N.C. Title: Frame theory and threat detection
15. June 27-July 4: keynote speaker at the meeting "New trends in harmonic analysis and complex analysis: with applications to fluid dynamics and PDE's", Jacobs University, Germany. Title of talk: The Kadison-Singer Problem in Harmonic Analysis.
16. August 2-4, 2010. Invited address at the conference: "Perspectives in High Dimensions", at Case Western Reserve University. Title: Fusion Frames and their applications.
17. August 4-8, 2010. Visit to the Air Force Institute of Technology to make a presentation to the Air Force on my research for them.
18. August 17-20, 2010. Visit to Wright-Patterson Air Force Base to make a presentation to the Defense Threat Reduction Agency on my research for them.
19. September 9 - 23, 2010. Visit the University of Houston to do research. Seminar Talk: Fusion Frames and Their Applications.
20. October 8 - 10, 2010: Plenary address: BIRS: Title: Problems surrounding the Kadison-Singer Problem.
21. October 12, 2010: Colloquium talk, University of Oregon. Title: Fusion frames and their applications.
22. October 13, 2010: Talk to the math club at the University of Oregon. Title: Mathematical Insanity.
23. October 15, 2010: Seminar talk at the University of Oregon. Title: Spectral Tetris constructions.
24. October 21, 2010: Seminar talk at the University of Missouri (DE Seminar): Title: Applications of Hilbert space frames.

25. October 26, 2010: Seminar talk, University of Missouri (Analysis Seminar) Title: Algorithms for threat detection.
26. November 2, 2010: Oberwolfach session on Harmonic Analysis and Applications. Title: The Kadison-Singer Problem in Harmonic Analysis.
27. November 15, 2010: Colloquium at the University of Osnabrueck, Germany. Title: Fusion frames and their applications.

2009

1. January 28, 2009. Colloquium talk: University of Osnabrueck, Germany. Title: Fusion Frames and Distributed Processing.
2. February 2, 2009. Colloquium talk: Jacobs University, Germany. Title: The Kadison-Singer Problem in Mathematics and Engineering.
3. February 19-20, 2009. Attended the February Fourier Talks at U. of Maryland. Turned down an invitation to speak but they paid all my expenses to attend as a “consultant” to make recommendations on how frame theory could help their area of research.
4. February 25, 2009. Colloquium talk, Air Force Insititute of Technology. Title: Fusion Frames and Distributed Processing.
5. March 15, 2009. Plenary address at the BIRS meeting on frames. Title: Five deep problems in frame theory. Other plenary speakers: Robert Calderbank (Princeton), Ingrid Daubechies (Princeton), John Benedetto (U. Maryland).
6. March 23, 2009. Colloquium talk, Colorado State U. Joint math/EE colloquium, Electrical Engineering Department. Title: Applications of Hilbert space frames.
7. April 5, 2009. Colloquium talk, Applied Math, Duke University. Title: Applications of Hilbert space frames.
8. May 11-15, 2009. Talk at the AIM workshop on the Kadison-Singer Problem. Title: Kadison-Singer in frame theory.
9. May 16-20, 2009. Seminar talk at San Francisco State University. “Non orthogonal fusion frames”.
10. June, 25-28, 2009. Seminar talk at the Air Force Institute of Technology. Title: The Kadison-Singer Problem.
11. August 2-6, 2009. Talk at the SPIE (Society of Photo-optical Instrumentation Engineers) annual meeting in San Diego. Title: A simple replacement scheme for erased frame coefficients.
12. September 16-20, 2009. Talk at the Air Force Institute of Technology. Title: Spectral Tetras.
13. November 14-15, 2009. Main address at the Illinois/Missouri Applied Harmonic Analysis Seminar. Held at St. Louis University. Title: A new notion of redundancy for finite frames.

2008

1. February 2, 2008. Seminar Talk: University of Houston. Title: Real equiangular tight frames.
2. February 15, 2008. Colloquium: University of Houston. Title: Applications of Hilbert space frames.

3. March 20, 2008. Talk in a special session of the CISS (Conference on Information Sciences and Systems), Department of Electrical Engineering, Princeton University. Title: Real Equiangular tight frames.
4. March 28, 2008. AMS special session, LSU. Title: The Kadison-Singer Problem in mathematics and engineering.”
5. April 13, 2008. AIM Squares meet on the Kadison-Singer Problem. Title: A concrete construction of non-two pavable matrices.
6. June 16, 2008. Air Force Institute of Technology. Seminar talk: Fusion frame potentials.
7. June 18, 2008. Plenary Address to GPOTS, University of Cincinnati. Title: The Kadison-Singer Problem in mathematics and engineering.
8. July 23, 2008. 50 minute address, IWOTA conference, College of William and Mary. Title: The Kadison-Singer Problem in mathematics and engineering.
9. August 18, 2008. Plenary address: AIM meeting on ”Concrete frames”. Title: Fusion frames and applications.
10. August 18, 2008. Plenary address: AIM meeting on ”Concrete frames”. Title: The Paulsen Problem in frame theory.
11. October 2, 2008. Colloquium: Michigan State University. Title: The Kadison-Singer Problem in mathematics and engineering.
12. October 2, 2008. Math Club Talk, Michigan State University. Title: Mathematical Insanity.
13. October 25, 2008. Math Club Talk, University of Alabama in Huntsville. Title: Mathematical Insanity.
14. October 25, 2008. Special session of AMS, University of Alabama in Huntsville. Title: The Kadison-Singer Problem in mathematics and engineering.
15. October 26 - 31, 2008. Attended the hot topics workshop at the IMA, Minneapolis on: Manifold Learning. They paid 100% of my expenses but I turned down giving a main address since this is not an area I work in. I was asked to attend because they just wanted my input on how ”frame theory” could help their topic.
16. November 1, 2008. Plenary Lecture: Workshop on Harmonic Analysis, University of Missouri, St. Louis, Title: The Kadison-Singer problem in harmonic analysis.

RESEARCH AND PUBLICATIONS

Papers

1. P.G. Casazza, *On a Geometric Condition Related to Boundedly Complete Bases and Normal Structure in Banach Spaces*, Proc. Amer. Math. Soc. **36** (1972), No. 2, pp. 443–447.
2. Z. Altschuler, P. G. Casazza and B. Lin, *On Symmetric Basic Sequences in Lorentz Sequence Spaces*, Israel J. Math. **15** (1975), pp. 140–155.
3. P.G. Casazza and B. Lin, *On Symmetric Basic Sequences in Lorentz Sequence Spaces II*, Israel J. Math. **17** (1974), pp. 191–218.
4. P.G. Casazza and B. Lin, *On Conditional Bases in Banach Spaces*, Revue Roumaine Math. Pures et App. **19** (1974), pp. 745–754.
5. P.G. Casazza and B. Lin, *On Lorentz Sequence Spaces*, Dedicated to Professor Ky Fan on the occasion of his 60th birthday. Bulletin of the Institute of Mathematics. Academia Sinica, **20**, No. 2, Dec. 1974, pp. 233–240.
6. P.G. Casazza and B. Lin, *Projections on Banach Spaces with Symmetric Bases*, Studia Mathematica **52** (1974), pp. 189–193.
7. P.G. Casazza and B. Lin, *A Note on Perfectly Homogeneous Bases in Banach Spaces*, Canadian Mathematical bulletin, **19**, (1975), pp. 137–140.
8. P.G. Casazza and R. H. Lohman, *A General Construction of Spaces of the Type of R. C. James*, Canadian J. Math **27**, (1975), pp. 1263–1270.
9. P.G. Casazza, C. Kottman, and B. L. Lin, *On primary Banach Spaces*, Bulletin of AMS, Communicated by R. R. Goldberg, **82**, No. 1, (January 1976), pp. 71–73.
10. P.G. Casazza and B. Lin, *A remark on Subsymmetric Bases in Banach Spaces*, Revue Romaine Math, Pures Et. Appl., **8** (1976) pp. 1025–1027.
11. P.G. Casazza and B. Lin, *Some Geometric Properties of Lorentz Sequence Spaces*, Rocky Mountain Journal of Math, **7**, No. 4, Fall 1977, pp. 683–698,
12. P.G. Casazza, B. Lin, and R. H. Lohman, *On James' Quasi-Reflexive Banach Space*, Proceedings of the AMS, **67**, No. 2, December 1977, pp. 265–271.
13. P.G. Casazza, C. Kottman, and B. L. Lin, *On Primary Banach Spaces*, Canadian Journal of Mathematics, **29**, 1977, pp. 856–873.
14. P.G. Casazza, *James' Quasi-Reflexive Space is Primary*, Israel Journal of Mathematics, **26**, Nos. 3–4, 1977, pp. 294–305.
15. P.G. Casazza, C. Kottman, and B. L. Lin, *Some Remarks on Fiegel's Reflexive Banach Space non-Isomorphic to its Square*, Journal of Mathematical Analysis and Applications, **63**, No. 3, May 1978, pp. 750–752.
16. P.G. Casazza, *Complemented Subspaces of A , H^1 , H^∞ in "A Collection of Problems on Linear Operators and Complex Analysis,"* edited by: N. K. Nikolskii, V. P. Havin, S. V. Krushev; Memoirs of the Academy of Sciences of the U.S.S.R., **81**, 1978, pp. 20–23.
17. P.G. Casazza, R. H. Lohman, and B. L. Lin, *On Nonreflexive Banach Spaces which Contain no C_0 or l_p* , Can. J. Math., **32**, No. 6, 1980, pp. 1382–1389.

18. P.G. Casazza, R. W. Pengra, and C. Sundberg, *The complemented Ideals in the Disc Algebra*, Israel J. Math., **37**, No. 1–2, 1980, pp. 76–83.
19. P.G. Casazza, *Some Remarks on Tsirelson's Space*, Proceedings of the research workshop on Banach Space Theory, University of Iowa, Ed. by Bor-Luh Lin (1982), pp. 9–22.
20. P.G. Casazza and E. Odell, *Tsirelson's Space and Minimal Subspaces*, Longhorn Lecture Notes (University of Texas at Austin), (1982–83), pp. 61–73.
21. P.G. Casazza, W. B. Johnson, and L. Tzafriri, *On Tsirelson's Space*, Israel J. Math. **47**, Nos. 2–3, 1984, pp. 81–98.
22. J. Bourgain, P. G. Casazza, J. Lindenstrauss, and L. Tzafriri, *Banach Spaces with a Unique Unconditional Basis up to Permutation*. Memoirs of the AMS, **54**, No. 322, May, 1985.
23. B. Beauzamy & P. G. Casazza, *Isometries de l'espace de Tsirelson*, Seminaire D'analyse Fonctionelle, Paris VI–VII, No. **26**, 1984/85, pp. 119–124.
24. P.G. Casazza, *Finite Dimensional Decompositions in Banach Spaces*, Contemporary Math, **52**, 1986, pp. 1–31.
25. P.G. Casazza, Nigel Kalton, and L. Tzafriri, *Decompositions of Banach Lattices into Direct Sums*, Trans. Ams. 304, No. 2, 1987, pp. 771–800.
26. P.G. Casazza, *The Schroeder-Bernstein Property for Banach Spaces*, Cont. Math. 85, 1989, pp. 61–78.
27. P. G. Casazza, *Projections onto Block Bases*, Cont. Math. **85**, 1989, pp. 45–60.
28. P. G. Casazza and T. Shura, *Tsirelson's Space* Springer Lecture notes number 1363, 1989, 204 pages.
29. P. G. Casazza, *The Commuting BAP for Banach Spaces*, London Math Society, lecture notes series #138, 1989, pp. 108–128.
30. P. G. Casazza, N. J. Kalton and L. Tzafriri, *Uniqueness of Unconditional and Symmetric Structures in Finite Dimensional Spaces*, Illinois Journal, Vol. **34**, No.4, 1990, p. 793–836.
31. P. G. Casazza and N. J. Kalton, *Notes on Approximation properties in Separable Banach spaces*, Lecture notes **158**, London Math Society, 1991, p. 49–65.
32. P.G. Casazza, *The norms of Projections onto ideals in the Disk Algebra*, Bulletin, London Math. Soc. No. 111, Vol. **24**, Part 6, Nov. 1992, p. 552–558.
33. P.G. Casazza, *Some questions arising from the homogeneous Banach space problem*, Contemporary Math. No. 144, 1993, p. 35–52.
34. P.G. Casazza, Book Review of “Classical Sequences in Banach Spaces, by Sylvie Guerre-Delabriere; Bulletin of the AMS, Vol. 30, No. 1, (1994) p. 117–124.
35. P.G. Cassazza, N.J. Kalton, D. Kutzarove, and M. Mastlylo, *Complex interpolation and complementably minimal spaces*, Lecture Notes in Pure and Applied Math, Interaction between Functional analysis, harmonic analysis, and Probability (Edited by N.J. Kalton, E. Saab, S. Montgomery-Smith), Vol. 175 (1995) 135–145.
36. P.G. Casazza and H. Jarchow, *Self-Induced compactness in banach spaces*, Proceedings of the Royal Society of Edinburgh, Vol 126A (1996) p. 355–362.
37. P.G. Casazza, *Some remarks on the Maurey extension property*, Colloquium Del Departamento De Analisis Matematico, Universidad Complutense, Curso 1994/95, p. 11–16.
38. P.G. Casazza and N.J. Kalton, *Unconditional bases and unconditional finite-dimensional decompositions in banach spaces*, Israel Journal of Math 95 (1996), p. 349–373.

39. P.G. Casazza and O. Christensen, *Hilbert space frames containing a Riesz basis and banach spaces which have no subspace isomorphic to c_0* , J. of Math Anal. and Appl. 202 (1996) p. 940-950.
40. P.G. Casazza, *Complemented unconditional basic sequences in banach lattices*, Seminaire d'Initiation a l'Analyse, 34e anne, Expose No. 19, p. 14, Publications Mathematiques de l'Universite Pierre et Marie Curie, Vol. 117, 1994-95.
41. P.G. Casazza and Ole Christensen, *Pertubation of operators and applications to frame theory*, Journal of Fourier Analysis and Applications, Vol. 3, No. 5 (1997) p. 543-557.
42. P.G. Casazza and N.J. Nielsen, *A Gaussian Average Property of Banach Spaces*, Illinois Journal of Mathematics, Vol. 41, No. 4 (1997) p. 559-576.
43. P.G. Casazza, *Characterizing Hilbert space frames with the subframe property*, Illinois Journal of Mathematics, Vol. 41, No. 4 (1997) p. 648-666.
44. P.G. Casazza and O. Christensen, *Approximation of the frame coefficients using finite-dimensional methods*, Journal of Electronic Imaging, special Volume 1997, "Best Papers in Electronic Imaging", Vol. 6, No. 4 (1997) p. 479-483.
45. P.G. Casazza and O. Christensen, *Riesz frames and finite dimensional approaches to problems in frame theory*, Journal of Approximation Theory and its Applications **101** (1998).
46. P.G. Casazza and O. Christensen, *Frames containing a Riesz basis and preservation of this property under pertubations*, SIAM Journal on Math Analysis, Vol. 29, No. 1 (1998) p. 266-278.
47. P.G. Casazza and N.J. Kalton, *Uniqueness of unconditional bases in banach spaces*, Israel Journal of Mathematics, Vol. 103 (1998) p. 141-176.
48. P.G. Casazza, *Every frame is a sum of three (but not two) orthonormal bases and other frame representations*, Journal of Fourier Analysis and Applications, **vol. 4 no. 6** (1998) p. 727-732.
49. P.G. Casazza and Ole Christensen, *Frames and Schauder bases*, Approximation Theory: In Memory of A.K. Varma, Marcel Dekker, Inc. Editors: N.K. Govil, R.N. Mohapatra, Z. Hashed, A. Sharma, and J. Szabados (book editor) (1998) p. 133-139.
50. P.G. Casazza and N.J. Kalton, *Extending the Paley-Wiener perturbation theory for banach spaces*, Proceedings of the AMS **vol. 127 No. 2** (1999) p. 519-527.
51. P.G. Casazza, Book Review of: "The James Forest", by Helga Fetter and Berta Gamboa de Buen, Bull. London Math. Soc. **31** (1999) p. 115-116.
52. P.G. Casazza, *Local theory of frames and Schauder bases in Hilbert space*, Illinois Journal of Mathematics, **43 no. 2**, (1999) p. 291-306.
53. P.G. Casazza and M. Lammers, *Genus in Banach spaces*, Illinois Journal of Mathematics, **43 no. 2** (1999) p. 307-323.
54. P.G. Casazza and O. Christensen, *Approximation of the inverse frame operator with applications to Weil-Heisenberg frames*, Approximation Theory IV, vol. 1: Theoretical Aspects, C. Chui and L. Schumaker eds., Vanderbilt University Press (1999) p. 67-74.
55. P.G. Casazza and N.J. Kalton, *Uniqueness of unconditional bases in c_0 -products*, Studia Math, **133(3)** (1999) 275-295.
56. G. Androulakis, P.G. Casazza, and D.N. Kutzarova, *Some more weak Hilbert spaces*, Canadian Math Bulletin, **Vol 43 (3)** (2000) 257-267.
57. P.G. Casazza, D. Han and D. Larson, *Frames for Banach spaces*, Contemp. Math 247, The Functional and Harmonic Analysis of Wavelets and Frames, Baggett and Larson eds., (2000) 149-181.

58. P.G. Casazza, O. Christensen, and A.J.E.M. Janssen, *Classifying tight Weyl-Heisenberg frames*. Contemp. Math 247, The Functional and Harmonic Analysis of Wavelets and Frames, Baggett and Larson eds., (2000) 131-148.
59. P.G. Casazza, *The art of frame theory*, Taiwanese Journal of Math., **Vol 4 (2)** (2000) 129-202.
60. P.G. Casazza, *Modern tools for Weyl-Heisenberg (Gabor) frame theory*, Advances in Imaging and Electron Physics **115** (2000) 1-127.
61. P.G. Casazza and O. Christensen, *Approximation of the inverse frame operator using finite dimensional methods*, Journal of Approximation Theory, **103** (2000) 338-356.
62. P.G. Casazza and J. Kovačević, *Uniform tight frames for signal processing and communication*, SPIE Proc., San Diego (2001). Wavelet Applications in Signal and Image Processing, A. Aldroubi, Z. Landeu, N. Unser, eds. Proceedings of SPIE, vol. 4119, SPIE, Bellingham, WA (2000) 129-134.
63. P.G. Casazza and N.J. Nielsen, *Embeddings of Banach spaces into Banach lattices and the Gordon-Lewis property*, Positivity, 5 (2000) 297-321.
64. P.G. Casazza, and M.C. Lammers, *Characteristic functions giving Weyl-Heisenberg frames*, SPIE Proc. 4001 (2000). Wavelet Applications in Signal and Image Processing, A. Aldroubi, Z. Landeu, N. Unser, eds.
65. P.G. Casazza and O. Christensen, *Weyl-Heisenberg frames for subspaces of $L^2(\mathbf{R})$* , Proceedings AMS, **Vol. 129, No. 1** (2001) 145-154.
66. P.G. Casazza, O. Christensen and A.J.E.M. Janssen, *Weyl-Heisenberg frames, translation invariant systems and the Walnut representation*, J. Functional Analysis **Vol. 180, No. 1** (2001) 85-147.
67. P.G. Casazza, O. Christensen, and N.J. Kalton, *Frames of translates*, Collect. Math. **52,1** (2001) 35-54.
68. P.G. Casazza, *Classifying irregular Gabor frames*, Proceedings of SAMPTA 2001, A.I. Zayed ed., IEEE Publications, (2001) 73-78.
69. P.G. Casazza, C.L. Garca and W.B. Johnson, *An example of an asymptotically hilbertian space which fails the approximation property*, Proc. Amer. Math. Soc. **129** (2001) 3017-3023.
70. P.G. Casazza, *The approximation property*, a chapter of the book (pages 271-316): Handbook of the Geometry of Banach Spaces, **Vol. I**, W.B. Johnson and J. Lindenstrauss eds., Elsevier, Amsterdam (2001).
71. P.G. Casazza and M.C. Lammers, *Analysizing the Weil-Heisenberg frame identity*, Applied and Computational Harmonic Analysis, **vol. 12** (2002) 171-178.
72. P.G. Casazza, O. Christensen, S. Li, and A. Linder, *Riesz-Fisher sequences and lower frame bounds*, Journal for Analysis and its Applications, **vol 21 No. 2** (2002) 305-314.
73. P.G. Casazza and N.J. Kalton, *Roots of complex polynomials and Weyl-Heisenberg frame sets*, Proceedings AMS **vol. 130, No. 8** (2002) 2313-2318.
74. P.G. Casazza and J. Kovacevic, *Uniform tight frames with erasures*, Advances in Computational Mathematics **Vol. 18, Nos. 2-4** (2003) pp. 387-430.
75. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Deficits and excesses of frames*, Advances in Computational Mathematics **Vol. 18, Nos. 2-4** (2003) pp. 93-116.
76. P.G. Casazza and O. Christensen, *Gabor frames over irregular lattices*, Advances in Computational Math **vol. 18, Nos. 2-4** (2003) pp. 329-344.

77. P.G. Casazza, *An introduction to irregular Weyl-Heisenberg frames*, in Sampling, Wavelets, and Tomography, J.J. Benedetto and A.I. Zayed, eds. Birkhäuser, Boston, Applied and Computational Harmonic Analysis, (2004) pp. 61-82.
78. P.G. Casazza and M. Lammers, *Bracket products for Weyl-Heisenberg frames*, Advances in Gabor Analysis. H.G. Fiechtinger and T. Strohmer, eds. Birkhäuser, Boston (2003) pp. 71-98.
79. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Excesses of Gabor frames*, Applied and Computational Harmonic Analysis **Vol. 14** (2003) pp. 87-106.
80. P.G. Casazza and N.J. Nielsen, *A Banach space with a symmetric basis which is of weak cotype 2 but not of cotype 2*, Studia Math. **Vol. 155** (2003) 1-21.
81. P.G. Casazza and N.J. Nielsen, *The solution to the Maurey extension problem for Banach spaces with the Gordon-Lewis property and related structures*, Studia Math (26 pages).
82. P.G. Casazza, *Approximation properties*, Handbook on the Geometry of Banach Spaces, Volume II. W.B. Johnson and J. Lindenstrauss eds, Elseviser, Amsterdam, 2003.
83. P.G. Casazza, O. Christensen and M.C. Lammers, *Perturbations of Weyl-Heisenberg frames*, Hokkaido Mathematical Journal, **Vol. XXXI, No. 3** (2002) pp. 539-553.
84. P.G. Casazza, O. Christensen and D. Stoeva, *Frame Expansions in Separable Banach Spaces*, JMAA **Vol. 307** (2005) pp. 710-723.
85. P.G. Casazza, M. Fickus, J. Kovacevic, M. Leon and J.C. Tremain, *A Physical Interpretation for Finite Tight Frames*, Applied and Computational Harmonic Analysis, (Submitted, 45 pages).
86. P.G. Casazza and M. Leon, *Existence and construction of finite tight frames*, J. Concr. Appl. Math. **4** No.3 (2006) 277-289.
87. P.G. Casazza and M. Leon, *Existence and Construction of finite frames with a given frame operator*, International Journal of Pure and Applied Mathematics **Vol. 63, No. 2** (2010) 149 - 158.
88. P.G. Casazza, O. Christensen, A.M. Lindner and R. Vershynin, *Frames and the Feichtinger Conjecture*, Proceedings AMS **Vol. 133, No. 4** (2005) pp. 1025-1033.
89. P.G. Casazza, *Custom Building Finite Frames*, Comtemporary Math. **Vol. 345** (2004) pp. 61-86.
90. P.G. Casazza, G. Liu, C. Zhao, and P. Zhao, *Perturbations and Irregular Sampling Theorems for Frames*, IEEE Trans. on Information Theory, (Accepted).
91. P.G. Casazza, G. Kutyniok and M.C. Lammers, *Duality Principles in Frame Theory*, Journal of Fourier Analysis and Applications, **Vol. 10** (2004) pp. 383-408.
92. P.G. Casazza, M.C. Fickus, J. Kovacevic, M.T. Leon and J.C. Tremain, *Physical Laws Governing Finite Tight Frames*, Proceedings of SPIE, wavelets: Applications in signal and image processing X, M.A. Unser, A. Aldroubi, and A.F. Laine, editors. San Diego, 2003. Vol. 5207 pp. 371-380.
93. P.G. Casazza and M.T. Leon, *Path Connectedness of the Wavelet Transform*, (Submitted, 10 pages).
94. P.G. Casazza and M. Leon, “liftware”. This is a MAT-LAB program for doing lifting of wavelets for signal and image processing. It was released to the public domain on April 8, 2003.
95. P.G. Casazza and M. Leon, “frameware 000” is a toolkit of MAT-LAB m -files for generating frames of M vectors in R^N , for any positive integers $N < M$ having prescribed norms of the vectors. This accompanies the paper of the authors “Existence and construction of finite tight frames”. Released to public domain in October, 2002.
96. P.G. Casazza and G. Kutyniok, *Frames of Subspaces*, Contemporary Math, Vol. 345 (2004) pp. 87-114.

97. P.G. Casazza and M. Leon, *Projections of Frames*, , Proceedings of SPIE, **Vol. 5914** (2005) pp. 591402 (1-8).
98. P.G. Casazza and R. Vershynin, *Kadison-Singer meets Bourgain-Tzafriri*, (Preprint).
99. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Density, Over Completeness, and Localization of Frames*, Electronic Research Announcements AMS, **12** (2006) pp. 71-86.
100. P.G. Casazza, M. Fickus, M.T. Leon and J.C. Tremain, *Constructing Infinite Tight Frames*, (Preprint).
101. P.G. Casazza, M. Fickus, J. Kovacevic, M.T. Leon and J.C. Tremain, *Representations of Frames*, (Preprint).
102. R. Balan, P.G. Casazza, D. Edidin, *On Signal Reconstruction from Absolute Value of Frame Coefficients*, Proceedings of SPIE, **Vol. 5914** (2005) pp. 591415 (1-8).
103. P.G. Casazza and G. Kutyniok, *A generalization of Gram Schmidt Orthogonalization generating all Parseval Frames*, Advances in Comput. Math, Vol 18 (2007) 65-78.
104. P.G. Casazza, O. Christensen, S. Li, and A. Lindner, *Density Results for Frames of Exponentials*, in Harmonic Analysis and Applications - in honor of Joh Benedetto, C. Heil Ed., Birkhauser (2006) pp. 359-370.
105. R. Balan, P. Casazza, and J. Rosca, *A Nonlinear Signal Enhancement Method that Bypasses Noisy Phase or its Estimation*, (Patent Application).
106. R. Balan, P.G. Casazza and D. Edidin, *Signal Reconstruction without Noisy Phase*, Applied and Computational Harmonic Analysis, **20** (2006) pp. 345-356.
107. P.G. Casazza and M. Fickus, *Fourier Transforms of Finite Chirps*, EURASIP Journal on Applied Signal Processing, **1** (2006) 1-7.
108. P.G. Casazza, G. Kutyniok and D. Speegle, *Decompositions of Frames and the Feichtinger Conjecture*, Proceedings of AMS **136** (2008) pp. 2043-2053.
109. R. Balan, P.G. Casazza, D. Edidin and G. Kutyniok, *Decompositions of Frames and a New Frame Identity*, Proceedings of SPIE, **Vol. 5914** (2005) pp. 591417 (1-10).
110. R. Balan, P.G. Casazza, D. Edidin and G. Kutyniok, *A New Frame Identity*, Proceedings AMS, **135** (2007) pp. 1007-1015.
111. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Density, Overcompleteness and Localizations of Frames, 1. Theory*, Journal of Fourier Analysis and Applications, **12** pp. 105-143.
112. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Density, Overcompleteness and Localizations of Frames, 2. Gabor Systems*, J. of Fourier Analysis and Applications, **12** (2006) pp. 309-344.
113. P.G. Casazza, G. Kutyniok and D. Speegle, *A Redundant Version of the Rado-Horn Theorem*, Linear Algebra and Applications, **418** (2006) pp. 1-10.
114. P.G. Casazza, G. Kutyniok and M.C. Lammers, *Duality Principles, Localization of Frames, and Gabor Theory*, Proceedings of SPIE, **Vol. 5914** (2005) pp. 591418 (1-9).
115. R. Balan, P.G. Casazza, C. Heil and Z. Landau, *Excess of Parseval Frames*, Proceedings of SPIE, **Vol. 5914** (2005) pp. 591406 (1-7).
116. P.G. Casazza and M. Fickus, *Chirps on Finite Cyclic Groups*, Proceedings of SPIE, **Vol. 5914** (2005) pp. 49140N (1-6).
117. P.G. Casazza and O. Christensen, *The Reconstruction property for Banach spaces and perturbation theorem*, canad. Math. Bulletin **51** No. 3 (2008) 348-358.

118. P.G. Casazza and J.C. Tremain, *The Kadison-Singer Problem in mathematics and engineering*, Proceedings of the National Academy of Sciences, **Vol. 103** No. 7 (2006) 2032-2039.
119. P.G. Casazza, M. Fickus, J.C. Tremain and E. Weber, *The Kadison-Singer Problem in mathematics and engineering— A detailed account*, Contemporary Math, **414**, Operator theory, operator algebras and applications, D. Han, P.E.T. Jorgensen and D.R. Larson Eds. (2006) 297-356.
120. P.G. Casazza, G. Kutyniok and S. Li, *Fusion frames and distributed processing*, Applied and computational harmonic analysis, **25** (2008) pp. 114-132.
121. P.G. Casazza and N. Leonhard, *Classes of finite equal norm Parseval Frames*, Contemp. Math **451** (2008) 11-31.
122. P.G. Casazza and N. Leonhard, *The known equal norm Parseval Frames*, Preprint.
123. P.G. Casazza and D. Edidin, *Equivalents of the Kadison-Singer Problem*, Contemp. Math, Vol. 435 (2007) 123-142.
124. R. Balan, P.G. Casazza and D. Edidin, Equivalence of reconstruction from the absolute value of the frame coefficients to a sparse representation problem, IEEE Signal Processing Letters **14** (2007) pp. 341-343..
125. P.G. Casazza, *A frame theory primer for the Kadison-Singer Problem*, Preprint.
126. P.G. Casazza and J.C. Tremain, *The paving conjecture and triangular matrices*, preprint.
127. P.G. Casazza, D. Edidin, D. Kalra and V. Paulsen, *Projections and the Kadison-Singer Problem*, Operators and Matrices, Vol. 1, No. 3 (2007) 391-408.
128. P.G. Casazza and G. Kutyniok, *Robustness of fusion frames uner erasures of subspaces and local frame vectors*, Contemporary Math. **464** (2008) pp. 149-160.
129. P.G. Casazza and E. Weber, *The Kadison-Singer Problem and the Uncertainty Principle*, Proc. AMS, **136** (2008) pp. 4235-4243.
130. R. Balan, B.G. Bodmann, P.G. Casazza and D. Edidin, *Fast algorithms for signal reconstruction without phase*, Fast algorithms for signal reconstruction without phase, Proceed. of SPIE - Wavelets XII, San Diego **6701** (2007) pp. 670111920-670111932.
131. P.G. Casazza, G. Kutyniok, S. Li and C. Rozell, *Modeling sensor networks with fusion frames*, Proceed. of SPIE - Wavelets XII, San Diego **6701** (2007) pp. 670111910-670111913.
132. B. Balan, B.G. Bodmann, P.G. Casazza and D. Edidin, *Painless reconstruction from magnitudes of frame vectors*, Journal Fourier Analysis and Applications **15**, No. 4 (2009) pp. 488-501.
133. P.G. Casazza and J.C. Tremain, *Revisiting the Bourgain-Tzafriri restricted invertibility theorem*, Operators and Matrices, **3**, No. 1 (2009) pp. 97-110.
134. P.G. Casazza and J.C. Tremain, *A brief introduction to Hilbert space frame theory and its applications*, <http://www.framerc.org>.
135. P.G. Casazza, S.J. Dilworth, E. Odell, T. Schlumprecht and A. Zsak, *Coefficient quantization for frames in Banach spaces*, J. Math. Anal. and Appls **348** No. 1 (2008) 66-86.
136. P.G. Casazza, D. Redmond and J.C. Tremain, *Real equiangular frames*, Proceedings of CISS, Princeton, N.J. (2008).
137. B. Bodmann, P.G. Casazza, D. Edidin and R. Balan, *Frames for linear reconstruction without phase*, Proceedings of CISS, Princeton, N.J. (2008).
138. P.G. Casazza, V. Paulsen and G. Weiss, *Problems on the Kadison-Singer Problem*, preprint.

139. P.G. Casazza, G. Kutyniok, D. Larson and D. Speegle, *Frames and the Kadison-Singer Problem*, preprint.
140. P.G. Casazza, *A mathematicians survival guide*, To appear: MAA book on *The psychology of the mathematician*.
141. P.G. Casazza, S. Obeidat, S. Samarah and J.C. Tremain, *Sums of Hilbert space frames*, Jour. Math. Anal. and Applications, **348** No. 2 (2008) 579–585.
142. P.G. Casazza and M. Fickus, *Minimizing fusion frame potentials*, Acta. Appl. Math **107** No. 103 (2009) 7–24.
143. P.G. Casazza, *Fusion frames and theoretical applications*, preprint.
144. R. Balan, P.G. Casazza and Z. Landau, *Redundancy for localized frames*, Israel Journal of Math. **185**, No. 1 (2011) 445-476.
145. P.G. Casazza, M. Fickus and D. Mixon, *Gradient descent of the frame potential*, To appear: European Journal of Signal Processing.
146. B. Bodmann, P.G. Casazza, G. Kutyniok and S. Senger, *Error correction for erasures of quantized frame coefficients*, Proceedings of SAMPTA (2009), <http://www.latp.univ-mrs.fr/SAMPTA09>.
147. B. Bodmann and P.G. Casazza, *The road to equal-norm Parseval frames*, Journal of Functional Analysis **258**, No. 2 (2010) 397-420.
148. P.G. Casazza and G. Pfander, *Infinite dimensional restricted invertibility*, Journal of Functional Analysis **263** No. 12 (2012) 3784-3803.
149. P.G. Casazza, M. Fickus, A. Heinecke, Y. Wang and Z. Zhou, *Spectral tetris fusion frame constructions*,
150. R. Calderbank, P.G. Casazza, A Heinecke, G. Kutyniok and A. Pezeshki, *Sparse fusion frames: existence and construction*, Advances in Computational Mathematics, **35** No. 1 (2011) pp. 1-31.
151. B. Bodmann, P.G. Casazza, G. Kutyniok and S. Senger, *A low complexity replacement scheme for erased frame coefficients*, Proceedings of SPIE, Wavelets XIII, San Diego (2009) pp. 744600-1-10.
152. P.G. Casazza, M. Fickus, D.G. Mixon, Y. Wang and Z. Zhou, *Construction and existence of tight fusion frames*, Proceedings of SPIE, Wavelets XIII, San Diego (2009) pp. 744613-1-10.
153. P.G. Casazza, M. Fickus, D. Mixon and J.C. Tremain, *The Bourgain-Tzafriri Conjecture and concrete constructions of non-pavable projections*, Operators and Matrices **5** No.2 (2011) 351-363.
154. B. Bodmann and P.G. Casazza, *When are frames close to equal-norm Parseval frames*, Proceedings of SPIE, Wavelets XIII, San Diego (2009) pp. 744616-1-8.
155. R. Calderbank, P.G. Casazza, A. Heinecks, G. Kutyniok and A. Pezeshki, *Constructing fusion frames with desired parameters*, Proceedings of SPIE, Wavelets XIII, San Diego (2009) pp. 744612-1-10.
156. P.G. Casazza and D. Redmond, *Real equiangular tight frames*, preprint.
157. B. Bodmann, P.G. Casazza and G. Kutyniok, *A quantitative notion of redundancy for finite frames*, Appl. and Comput. Harmonic Anal. **30** (2011) 348-362.
158. B. Bodmann, P.G. Casazza, V. Paulsen and D. Speegle, *Spanning and independence properties of frames*, Proceedings of AMS, **40** No. 7 (2012) 2193–2207.
159. B. Bodmann, P.G. Casazza and G. Kutyniok, *Upper and lower reudndancy for finite frames*, Proceedings of CISS (2010), Princeton, N.J.
160. Peter G. Casazza, Matthew Fickus, Dustin G. Mixon and Janet C. Tremain, *The Bourgain-Tzafriri conjecture and concrete constructions of non-pavable projections*, to appear in *Operators and Matrices*.

161. J. Cahill, P.G. Casazza and A. Heinecke, *A notion of redundancy for infinite frames*, Proceedings of SAMPTA 2011, Singapore.
162. P.G. Casazza, M. Fickus and D. Mixon, *Auto-tuning unit norm frames*, Applied and Computational Harmonic Analysis **32** (2012) 1-15.
163. P.G. Casazza, A. Heinecke, F. Kraemer and G. Kutyniok, *Optimally sparse frames*, IEEE Trans. on Information Theory **57** No. 11 (2011) 7279-7287.
164. J. Cahill, P.G. Casazza and A. Heinecke, *Redundancy for frames*, to appear- Proceedings of SAMPTA 2011.
165. P.G. Casazza, A. Heinecke and G. Kutyniok, *Optimally sparse fusion frames: Existence and construction*, to appear - Proceedings of SAMPTA 2011.
166. P.G. Casazza, M. Fickus, D. Mixon, Y. Wang and Z. Zhou, *Constructing tight fusion frames*, Applied and Computational Harmonic Analysis **30** No. 2 (2011) 175-187.
167. J. Cahill, P.G. Casazza and Shidong Li, *Non-orthogonal fusion frames and the sparsity of fusion frame operators*, Jour. Fourier Anal. and Appls. **18** No. 2 (2012) 287-308.
168. P.G. Casazza, M. Fickus, D. Mixon, J. Peterson and I. Smalyanau, *Every Hilbert space frame has a Naimark complement*, J. Math. Anal. and Appl. **406** No. 1 (2013) 111-119.
169. J. Cahill and P.G. Casazza, *The Paulsen Problem in operator theory*, Operators and Matrices **7** No. 1 (2013) 117-130.
170. B.G. Bodmann, P.G. Casazza and G. Kutyniok, *A quantitative notion of redundancy and its applications*, Proceedings of SAMPTA (2011).
171. B.G. Bodmann, P.G. Casazza, J. Peterson, J.C. Tremain and I. Smalyanau, *Equi-isoclinic fusion frames and mutually unbiased basic sequences*, preprint.
172. J. Cahill, P.G. Casazza and S. Li, *Non-orthogonal fusion frames* Proc. of SPIE, Wavelets XIV, San Diego (2011).
173. P.G. Casazza, M. Fickus, A. Heinecke, Y. Wang and Z. Zhou, *Spectral tetris fusion frames*, Proc. of SPIE, Wavelets XIV San Diego (2011)
174. J. Cahill, P.G. Casazza and G. Kutyniok, *Operators and Frames*, Journal of Operator Theory, Volume 70, Issue 1, (2013) 145-164
175. P.G. Casazza, *The Kadison-Singer and Paulsen Problems in Finite Frame Theory*, in *Finite Frame Theory*; Eds. P.G. Casazza and G. Kutyniok, Birkhäuser, Boston (2012).
176. P.G. Casazza and D. Speegle, *Spanning and Independence Properties of Finite Frames*, in *Finite Frame Theory*; Eds. P.G. Casazza and G. Kutyniok, Birkhäuser, Boston (2012).
177. P.G. Casazza and G. Kutyniok, *Fusion Frames*, in *Finite Frame Theory*; Eds. P.G. Casazza and G. Kutyniok, Birkhäuser, Boston (2012).
178. B. Bodmann, P.G. Casazza and J. Cahill, *Fusion frames and the restricted isometry property*, In Numerical Functional Analysis and Optimization, Special Issue on Operator Algebras and Representation Theory: Frames, Wavelets, Fractals, P. G. Casazza, P.E.T. Jorgensen, K.A. Kornelson, G. Kutyniok, D.R. Larson, P. Massopust, G. Olegsson, J.A. Packer, S. Silvertor and Q. Sun Eds. **33**, No. 7-9 (2012)
179. P.G. Casazza and J. Peterson, *An elementary, illustrative proof of the Rado-Horn Theorem*, Linear Algebra and Applications, **437** No. 10, (2012) 2523-2537.
180. P.G. Casazza, F. Philipp and G. Kutyniok, *An Introduction to Finite Frame Theory*, in *Finite Frame Theory*, Eds. P.G. Casazza and G. Kutyniok, Birkhäuser, Boston (2012).

181. P.G. Casazza, M. Fickus, A. Heinecke, Y. Wang and Z. Zhou, *Spectral tetris fusion frame constructions*, Jour. Fourier Anal. and Appls. **18** No. 4 (2012) 828-851.
182. P.G. Casazza, A. Heinecke, K. Kornelson, Y. Wang and Z. Zhou, *Necessary and sufficient conditions to perform spectral tetris*, Linear Algebra and Appls, **438** No. 5 (2013) 2523-2537.
183. P.G. Casazza and G. Pfander, *Analyzing the algorithm for proving the restricted invertibility theorem*, Preprint.
184. P. G. Casazza, P.E.T. Jorgensen, K.A. Kornelson, G. Kutynoik, D.R. Larson, P. Massopust, G. Olegsson, J.A. Packer, S. Silvertor and Q. Sun Eds., Numerical Functional Analysis and Optimization, Special Issue on Operator Algebras and Representation Theory: Frames, Wavelets, Fractals, **33**, No. 7-9 (2012).
185. P.G. Casazza and G. Pfander, *Infinite dimensional restricted invertibility*, J. Functional Analysis **263** No. 12 (2012) 3784-3803.
186. P.G. Casazza, Guest Editor, Notices AMS **59** No. 7, August (2012) *A Tribute to Nigel J. Kalton (1946-2010)*. Included an article of mine.
187. P.G. Casazza and J. Peterson, *Weighted Fusion Frame Construction Via Spectral Tetris*, Preprint.
188. P.G. Casazza, *The simplified version of the Spielman and Srivastava algorithm for proving the Bourgain-Tzafriri restricted invertibility theorem*, Preprint.
189. J. Cahill, P.G. Casazza, J. Peterson and L. Woodland, *Phase retrieval by projections*, Preprint.
190. P.G. Casazza, R.G. Lynch, J.C. Tremain and L.M. Woodland, *Integer Frames*, Preprint.
191. J. Cahill, P.G. Casazza, J. Peterson and L. Woodland, *Using projections for phase retrieval*, Proc. SPIE, Wavelets XV, San Diego (2013).
192. J. Cahill, P.G. Casazza, M. Ehler and S. Li, *Tight and random non-orthogonal fusion frames*, Preprint.
193. P.G. Casazza and L. Woodland, **Phase retrieval by vectors and projections**, Preprint.

Miscellaneous

1. *P-Hilbertian, Q-besselian and universal bases in Banach spaces* (Ph.D. Thesis), University of Iowa, 1972.
2. *Metric spaces*, Textbook, 500 pages, (not submitted for publication)

TEACHING PUBLICATIONS

1. P. G. Casazza, *Paradox Lost*, Alabama Journal of Mathematics, Fall 1977, pp. 66–73
2. P. G. Casazza, *Are There Any Uninteresting Natural Numbers?*, Alabama Journal of Mathematics, Fall 1977, pp. 27–38.
3. P. G. Casazza, *Is 1,200,000 Only a Number?*, Alabama Journal of Mathematics, Spring 1978, pp. 29–31.
4. P. G. Casazza, *George Washington: He Liked to Count Things*, Alabama Journal of Mathematics, Fall 1978, pp. 43–47 (Published under the pen name "Cora Green").
5. P. G. Casazza, *Give Me a Tablespoon of Paint and I Will Paint the Whole Universe*, Alabama Journal of Mathematics, Fall 1978, pp. 33–39 (Published under the pen name "Cathy Peters").
6. P. G. Casazza, *On Pepperoni Pizzas, Ham Sandwiches, and Other Important Mathematical Problems*, Alabama Journal of Mathematics, Spring 1979 (Published under the pen name "Patricia Caldwell").
7. P. G. Casazza, *Is Probability Probable?*, Alabama Journal of Mathematics, Fall 1979, pp. 9–17 (Published under the pen name of "Cora Green").
8. P. G. Casazza, *An Interesting Problem to "Bug" Your Students With*, Alabama Journal of Mathematics, Fall 1979, pp. 25–35 (Published under the pen name "Cathy Peters").
9. P. G. Casazza, *Dear Pythagoras: See What You Started*, Alabama Journal of Mathematics, spring 1980, pp. 17–25 (Published under the pen name of "Barbara B. Cook").
10. P. G. Casazza, *On the Irrationality of e and π* , Alabama Journal of Mathematics, Spring 1981, pp. 17–22, (Under the pen name "Gina Phillips").
11. P. G. Casazza, *College Algebra: How it was in 1886*, Alabama Journal of Mathematics, Spring 1981, pp. 17–22, (Under the pen name "Pamela G. Conway").
12. P. G. Casazza, *This Article Needs a Title*, Alabama Journal of Mathematics, **6**, No. 1, April 1982, pp. 27–33.
13. P. G. Casazza, *Right Triangles and the Pythagorean Theorem*, Alabama Journal of Mathematics, **6**, No. 1, April 1982, pp. 34–38.
14. P. G. Casazza, *Maximizing Areas Without Calculus*, Alabama Journal of mathematics, **7**, No. 2, April 1984, pp. 29–43.
15. P. G. Casazza, *Paradoxes in Mathematics*, (pp. 67–74) one chapter of the book, "High School Student Merit Awards", Edited by Leroy Sachs, National Council of Teachers of Mathematics, 1984.
16. P.G. Casazza, *Mathematics and Intuition - An Uncomfortable Allinace*, ARAF, elektronik dil-dusunce dergisi, Vol. 7 (1996) p. 9-20.
17. P.G. Casazza, M.A. Cecil, M. Heppner, D.P. Ranly, and M.J. Porter, *Teaching and Learning Across the Curriculum*, University of Missouri Press (2005).
18. P. Casazza, M. Cecil, M.J. Heppener, M.J. Porter, and D. Ranly, *Teaching and Learning Across the Curriculum*, (Book chapter in: *Developing a Teaching Philosophy: Inspirations from outstanding faculty*) University of Missouri, Columbia, MO (2005).
19. P.G. Casazza, *A mathematicians survival guide*, to appear in a book being published by the MAA entitled: *The psychology of the mathematician*.
20. P.G. Casazza, *A mathematicians survival guide*, Vestnik SamGU 2009 (Samara Scientific Magazine) Russian translation of the previous item.