

CURRICULUM VITAE

Name — Krzysztof Galicki
Born — August 10, 1958, Poland
Citizenship — United States
Current address — Department of Mathematics & Statistics
The University of New Mexico
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• Education

August 1987 — **Doctor of Philosophy** in Mathematical Physics,
SUNY@Stony Brook, Stony Brook, NY, U.S.A.
May 1987 — **Master of Arts**,
SUNY@Stony Brook, Stony Brook, NY, U.S.A.
April 1982 — **Master's Degree** in Theoretical Physics,
University of Wrocław, Wrocław, Poland

• **Area of Research** — Differential Geometry and Mathematical Physics

• Current Position

08/1999 - present — **Professor**
— Department of Mathematics & Statistics,
— **University of New Mexico**, Albuquerque, NM, U.S.A.

• **Previous Positions**

- 08/1993 - 08/1999 — **Associate Professor**, Department of Mathematics & Statistics, **University of New Mexico**, Albuquerque, NM, U.S.A.
- 08/1990 - 08/1993 — **Assistant Professor**, Department of Mathematics & Statistics, **University of New Mexico**, Albuquerque, NM, U.S.A.
- 07/1987 - 07/1990 — G. C. Evans Instructor, **Rice University**, Department of Mathematics, Houston, TX, U.S.A.
- 09/1984 - 06/1987 — Research Assistant at the **Yang's Institute**, SUNY@Stony Brook, NY, U.S.A.
- 09/1982 - 08/1984 — Assistant faculty member at the Institute for Theoretical Physics, **University of Wrocław**, Wrocław, Poland

• **Concurrent Visiting Positions (one semester or longer)**

- 01.01-12.31 • 2004 — **Max-Planck-Institut für Mathematik**
Bonn, Germany (planned future visit)
- 01.01-12.31 • 1997 — **Max-Planck-Institut für Mathematik**
Bonn, Germany
- 01.01-05.30 • 1991 — School of Mathematics, **Institute for Advanced Study**,
Princeton, NJ, U.S.A.

• **Other Visiting Positions (2 weeks to 2 months)**

- 2006, 2005, 2003, 2001, 1999, 1995, 1993, 1989 — **Max-Planck-Institut für Mathematik**
Bonn, Germany
- 2005 — **Institut de Mathématiques Élie Cartan**,
Université Henri Poincaré Nancy 1, Nancy, France
- 2005, 2003, 2001, 1998 — **Univeristà di Roma "La Sapienza"**, Rome, Italy
- 2005, 2002, 2000 — **Institut des Hautes Études Scientifiques**,
Bures-sur-Yvette, France
- 2005, 2004, 2002, 1999, 1994 — **Erwin Schrödinger Institute for Mathematical Physics**, Vienna, Austria
- 2005, 2001, 1995 — **Humboldt Universität**, Berlin, Germany

- 1997, 1996 — **International Center for Mathematical Sciences**,
Edinburgh, Scotland, United Kingdom.
- 1997 — **Vrije Universiteit**, Amsterdam, Holland
- 1989 — **Odense University**, Odense, Denmark

• **NSF Research Grants**

- 2005 – 2008 — NSF Award in Geometric Analysis,
*Einstein Metrics, Sasakian Geometry and Kähler
Orbifolds*; (with C. P. Boyer)
- 2002 – 2005 — NSF Award in Geometric Analysis,
*Contact Geometry, Fano Orbifolds, and Einstein
Metrics*; (with C. P. Boyer)
- 1999 – 2002 — NSF Award in Geometric Analysis,
Contact Geometry and Einstein Metrics
(with C. P. Boyer)
- 1995 – 1998 — NSF Award in Geometric Analysis,
*Quaternionic Quotients, Einstein Manifolds,
and the Topology of Moduli Spaces*;
(with C. P. Boyer and B. Mann)
- 1993 – 1995 — NSF Award in Geometric Analysis,
*Quaternionic Quotients, Einstein Manifolds,
and Mathematical Physics*
- 1991 – 1993 — NSF Award in Geometric Analysis,
*Geometry of Quaternionic Manifolds and
Mathematical Physics*
- 1989 – 1991 — NSF Award in Geometric Analysis,
Complex Geometry and Mathematical Physics;
(with Y. S. Poon)
- 1988 – 1989 — NSF Award in Geometric Analysis,
Geometry and Mathematical Physics;
(with Y. S. Poon and R. Wells)

• **Other Grants and Awards**

- 2005, 2003, 2001, 1998 — Istituto Nazionale di Alta Matematica (INdAM)
grants to support my visits at “La Sapienza”
- 2003 — National Research Council COBASE Grant

2000	— UNM A&S Senior Professor Research Semester Award
1995 – 1996	— Efroymsen Award
1994 – 1997	— UNM Regent’s Lecturer Award

• **Invited Addresses and Conferences**

1. January 26, 2006 – *Geometric Structures on 5-Manifolds*, Ohio State University colloquium, **Columbus**, Ohio, USA.
2. December 16, 2005 – *Geometric Structures on 5-Manifolds*, Universität Köln geometry seminar, **Köln**, Germany.
3. November 22, 2005 – *Geometric Structures on 5-Manifolds*, Humboldt Universität geometry seminar, **Berlin**, Germany.
4. November 14, 2005 – *Geometric Structures on 5-Manifolds*, Jagiellonian University geometry seminar, **Kraków**, Poland.
5. November 1, 2005 – *Seifert Bundles and Contact Structures*, invited lecture at the Erwin Schrödinger Institute, **Vienna**, Austria.
6. October 10, 2005 – *Manifolds with Positive Ricci Curvature*, Arthur Besse seminar, École Polytechnique, **Palaiseau**, France.
7. September 23 – *Sasakian Structures in Mathematics and Physics*, invited lecture at the *Géométrie Pseudo-Riemannienne et Supersymétrie*, September 22-24, 2005; Institut de Recherche Mathématique Avancée de Strasbourg, **Strasbourg**, France.
8. September 1, 2004 – *Geometric Structures on 5-manifolds*, MPIM Oberseminar, MPIM, **Bonn**, Germany.
9. August 5 – *Geometric Structures on 5-Manifolds*, invited lecture at the SFB 478 workshop *Curvature and Global Shape, 31 July – 7 August, 2005*, **Münster**, Germany.
10. July 25, 2005 – *Geometric Structures on 5-Manifolds*, geometry seminar at the Università di Cagliari, **Cagliari**, Italy.
11. July 12, 2005 – *Geometric Structures on 5-Manifolds*, geometry seminar at the Università di Roma, “La Sapienza”, **Rome**, Italy.
12. July 3, 2005 – *Geometric Structures on 5-manifolds*, colloquium talk at Università di Bari, **Bari**, Italy.
13. June 7, 14, 2005 – *Sasakian Geometry I-III*, invited series of **three** lectures at the Institut Élie Cartan, Université Henri Poincaré, **Nancy**, France.
14. June 13, 2005 – *Sasakian Geometry of 5-Manifolds*, Arthur Besse seminar, École Polytechnique, **Palaiseau**, France.

15. December 10, 2004 – *Einstein Metriken auf Exotischen Sphären* (in German), Universität Hamburg, **Hamburg**, Germany.
16. November 19, 2004 – *Einstein Metrics on Spheres*, lecture given at the geometry seminar at the University of Bochum, **Bochum**, Germany.
17. November 2, 2004 – *Einstein Metrics on Brieskorn Manifolds*, lecture given at the geometry seminar at the University of Hamburg, **Hamburg**, Germany.
18. October 21, 2004 – *Einstein Metrics on Spheres*, lecture given at the geometry seminar at the University of Bonn, **Bonn**, Germany.
19. October 17, 2004 – *Seifert Bundles, log del Pezzo Surfaces, and Einstein 5-Manifolds*, MPI Oberseminar Topologie, **Bonn**, Germany.
20. October 12,14,15, 2004 – *Sasakian Structures and Einstein Metrics I-III*, series of **three** lectures at Centro di Ricerca Matematica Ennio De Giorgi, *Differential Geometry and Topology, September 6 - November 12, 2004*, **Pisa**, Italy.
21. May 12, 2004 – *Transverse Fano Structures and Einstein Metrics on Spheres*, invited colloquium, University of Bucharest, **Bucharest**, Romania.
22. April 22, 2004 – *Transverse Fano Structures and Einstein Metrics on Spheres*, invited colloquium, University of Göttingen, **Göttingen**, Germany.
23. April 6, 2004 – *Transverse Fano Structures and Einstein Metrics on Spheres*, invited lecture at the Erwin Schrödinger Institute in the program *Geometric and analytic problems related to Cartan connections*, **Vienna**, Austria.
24. March 18, 2004 – *Transverse Fano Structures and Einstein Metrics on Spheres*, MPIM Oberseminar, MPIM, **Bonn**, Germany.
25. February 28, 2004 – *Einstein Metrics on Spheres*, invited lecture at the *Positive scalar curvature and related topics* conference at LMU München, **München**, Germany.
26. February 2, 2004 – *Transverse Fano Structures and Einstein Metrics on Spheres*, geometry seminar at the University of Oxford, **Oxford**, England.
27. January 18-24, 2004 – *Contact Structures, Complex Singularities, and Einstein Metrics I-III*, a series of **three** invited plenary lectures at the *XXIV Winter School in Geometry and Physics*, **Srni**, Czech Republic.
28. July 21, 2003 – *Transverse Fano Structures, Ricci Curvature, and Einstein Metrics*, geometry seminar at the Università di Cagliari, **Cagliari**, Italy.
29. July 4, 2003 – *Negative Self-Dual Einstein Metrics as Quotients*, lecture given at Università di Roma, “La Sapienza”, **Roma**, Italy.
30. June 24, 2003 – *Transverse Fano Structures, Ricci Curvature, and Einstein Metrics*, geometry seminar at the Università di L’Aquila, **L’Aquila**, Italy.
31. May 2, 2003 – *Transverse Fano Structures, and Einstein Metrics*, geometry seminar at the University of California, **Riverside**, California, USA; May 2, 2003.

32. April 30, 2003 – *Transverse Fano Structures and Positive Ricci Curvature*, colloquium at the University of California, **Riverside**, California, USA; April 30, 2003.
33. April 8, 2003 – *Transverse Fano Structures, Ricci Curvature, and Einstein Metrics*, colloquium at the Oregon State University, **Corvallis**, Oregon, USA.
34. April 8, 2003 – *Transverse Fano Structures, Ricci Curvature, and Einstein Metrics*, geometry seminar at the University of Oregon, **Eugene**, Oregon, USA.
35. November 22, 2002 – *Transverse Fano Structures, Positive Ricci Curvature, and Einstein Metrics*, invited lecture at the Erwin Schrödinger Institute, **Vienna**, Austria.
36. June 15, 2002 – *On the Geometry of Sasakian-Einstein 5-Manifolds*, invited lecture at the Joint International AMS/UMI Meeting in Pisa, June 12-16, **Pisa**, Italy.
37. June 6, 2002 – *Sasakian Manifolds and Einstein Metrics in Dimension 5*, invited lecture at the EDGE meeting on *Special and Low-dimensional Geometries*, June 3-7, **Luminy**, France.
38. May 28, 2002 – *Contact Structures, Einstein Metrics and Positive Ricci Curvature*, invited lecture at Institut Élie Cartan, Université Henri Poincaré, **Nancy**, France.
39. May 27, 2002 – *Sasakian Manifolds and Einstein Metrics*, Arthur Besse seminar, École Polytechnique, **Palaiseau**, France.
40. December 6, 2001 – *Metric Cones, Holonomy, and Special Metrics*, the SFB 288 *Differentialgeometrie und Quantenphysik Kolloquium*, Freie Universität Berlin, **Berlin**, Germany.
41. November 24, 2001 – *Contact Structures and Algebraic Geometry*, invited lecture at the conference *Recent trends in mathematics*, November 23-25, 2001, **Schloss Klink**, Germany.
42. November 19, 2001 – *On Sasakian-Einstein 5-Manifolds*, Humboldt Universität geometry seminar, **Berlin**, Germany.
43. September 26, 2001 – *New Einstein Metrics in Dimensions Five and Seven*, lecture given at the Università di Roma, “La Sapienza”, **Rome**, Italy.
44. August 4, 2001 – *3-Sasakian Geometry, Nilpotent Orbits, and Exceptional Quotients*, LMS Durham Symposium, *Special Structures in Differential Geometry*, University of Durham, July 30 – August 9, 2001, **Durham**, England.
45. June 11, 2001 – *Algebraic Geometry and Einstein manifolds in Dimension Five*, invited lecture at Mathematisches Forschungsinstitut Oberwolfach, *Differentialgeometrie im Grossen*, June 11 – 15, **Oberwolfach**, Germany.
46. May 22, 2001 – *Algebraic Geometry and Compact Einstein 5-Manifolds*, lecture given at the geometry seminar at the University of Bonn, **Bonn**, Germany.
47. March 21, 2001 – *Sasakian-Einstein Geometry of 5-Manifolds*, lecture given at the Università di Roma, “La Sapienza”, **Rome**, Italy.

48. May 19, 2000 – *New Einstein Metrics on 5-Manifolds*, Arthur Besse seminar, Ecole Polytechnique, **Palaiseau**, France.
49. August 29, 1999 – *Killing Spinors, Einstein Manifolds, and Contact Geometry*, invited lecture at the conference on *Generalized Dirac Operators and Their Geometric Scattering Theory*, Warsaw, 23 August - 4 September, 1999; International Stefan Banach Center of the Polish Academy of Sciences, **Warsaw**, Poland.
50. July 13, 1999 – *Sasakian-Einstein Manifolds, Killing Spinors, and Near Horizon Geometries*, Humboldt Universität geometry seminar, **Berlin**, Germany.
51. June 17, 1999 – *Contact Structures, Einstein Manifolds, and Near Horizon Geometries*, Universität München geometry seminar, **München**, Germany.
52. February 22, 1999 – *Cones, Holonomy, and Einstein Manifolds*, colloquium talk at West Washington University, **Bellingham**, Washington, USA.
53. June 18, 1998 – *New Families of Einstein 7-manifolds*, colloquium talk at Università di Bari, **Bari**, Italy.
54. June 2,4,9,2, 1998 – *A Short Introduction to 3-Sasakian Manifolds I-IV*, **four** lectures given at the Università di Roma, “La Sapienza”, **Rome**, Italy.
55. December 4, 1997 – *Quaternionic Geometry and Einstein Manifolds*, colloquium given in the University of Leipzig, **Leipzig**, Germany.
56. November 9, 1997 – *Hypercomplex Structures on Toral Quotients*, talk given in the Special Session of the AMS Meeting, **Albuquerque**, New Mexico, USA.
57. October 9, 1997 – *Einstein Manifolds From Spheres*, report on my research presented to the Fachbeirat at the Max-Planck-Institut für Mathematik in **Bonn**, Bonn, Germany.
58. August 18, 1997 – *Quaternionic Geometry and Einstein Manifolds*, lecture at the ICMS conference *Complex Methods in Differential Geometry* 18-29 August, 1997, **Edinburgh**, Scotland.
59. July 15, 1997 – *Quaternionic Geometry and Einstein Manifolds*, lecture given in the MPI Faltings-Harder-Manin-Zagier Oberseminar, MPI, **Bonn**, Germany.
60. June 9, 1997 – *Making Einstein Manifolds Out of Spheres*, geometry seminar at the Jagiellonian University, **Kraków**, Poland.
61. April 7, 1997 – *On Betti Numbers of 3-Sasakian Manifolds*, Topologie Oberseminar MPI, **Bonn**, Germany.
62. February 21, 1997 – *Compact Einstein 7-manifolds of Positive Scalar Curvature and Arbitrary Second Betti Number*, and *3-Sasakian Geometry and Killing Spinors*, **two** lectures at the *Meeting on Dirac Operators and Geometry*, Warsaw, 16 February – 1 March, 1997, International Stefan Banach Center of the Polish Academy of Sciences, **Warsaw**, Poland.

63. February 4, 1997 – *Compact Einstein 7-manifolds of Positive Scalar Curvature and Arbitrary Second Betti Number*, geometry seminar at the University of Bonn, **Bonn**, Germany.
64. November 13, 1996 – *Making Einstein Manifolds Out of Spheres*, colloquium at the University of California at Riverside, **Riverside**, California, USA.
65. June 4,6,27, 1996 – *Geometry and Topology of 3-Sasakian Manifolds I-III*, **three** lectures at the ICMS Workshop *Interplays Between Geometry and Topology*, June 3-29, 1996, **Edinburgh**, Scotland.
66. April 14, 1996 – *Hypercomplex manifolds and 3-Sasakian geometry*, contributed paper in a Special Session at the AMS meeting, April 13-14, 1996, **New York**, New York, USA.
67. December 1, 1995 – *On Betti Numbers of 3-Sasakian Manifolds*, contributed paper in a Special Session at the second joint meeting of AMS and SMM, November 29 – December 2, 1995, **Guanajuato**, Mexico.
68. November 21, 1995 – *Geometry and Topology of 3-Sasakian Manifolds: On Betti Numbers of 3-Sasakian Spaces*, Humboldt Universität geometry seminar, **Berlin**, Germany.
69. November 16, 1995 – *Quaternionic Geometry, Supergravity, and Einstein Manifolds*, colloquium at Augsburg University, **Augsburg**, Germany.
70. November 14, 1995 – *Geometry and Topology of 3-Sasakian Manifolds: Quotient Construction*, Humboldt Universität geometry seminar, **Berlin**, Germany.
71. November 9, 1995 – *Quaternionic Geometry, 3-Sasakian Manifolds, and Supergravity*, the SFB 288 *Differentialgeometrie und Quantenphysik* Kolloquium, Freie Universität Berlin, **Berlin**, Germany.
72. June 12, 1995 – *3-Sasakian Manifolds*, invited lecture at Mathematisches Forschungsinstitut Oberwolfach, *Differentialgeometrie im Grossen*, June 12 – 16, **Oberwolfach**, Germany.
73. June 9, 1995 – *Geometry and Topology of 3-Sasakian Manifolds*, geometry seminar at the Max-Planck-Institut, **Bonn**, Germany.
74. May 22, 1995 – *Geometry and Topology of 3-Sasakian Manifolds*, invited lecture in Arthur Besse Seminar at École Polytechnique, **Paris**, France.
75. January 10, 1995 – *3-Sasakian Manifolds*, lecture presented at the conference on *Representation Theory and Differential Geometry*, University of Adelaide, **Adelaide**, Australia.
76. September 28, 1994 – *Einstein Metrics and 3-Sasakian Geometry*, lecture presented at Erwin Schrödinger Institute, **Vienna**, Austria.
77. September 9, 1994 – *On 3-Sasakian Manifolds*, lecture presented at the Meeting on *Quaternionic Structures in Mathematical Physics*, September 5 – 9, 1994; SISSA, **Trieste**, Italy.

78. November 17, 1993 – *On Strongly Inhomogeneous Einstein Manifolds with Positive Scalar Curvature and 3-Sasakian Structure*, talk presented at Columbia University, **New York**, New York, USA.
79. November 16, 1993 – *On Strongly Inhomogeneous Einstein Manifolds with Positive Scalar Curvature and 3-Sasakian Structure*, talk presented at SUNY at Stony, Brook, **Stony Brook**, New York, USA.
80. November 15, 1993 – *On Strongly Inhomogeneous Einstein Manifolds with Positive Scalar curvature and 3-Sasakian structure*, talk presented at the Institute for Advanced Study, **Princeton**, New Jersey, USA.
81. July 1, 1993 – *A Construction of Strongly Inhomogeneous Einstein Manifolds with 3-Sasakian Structure*, talk presented at the Max-Planck Institut Harder-Hirzebruch-Zagier Oberseminar, Max-Planck Institut für Mathematik, **Bonn**, Germany.
82. June 4, 1993 – *Einstein Manifolds in Field Theories with Supersymmetry*, talk given at the University of Wrocław, **Wrocław**, Poland.
83. May 26, 1992 – *O Pewnych Siedmiowymiarowych Rozmaitościach Einsteina*, Wrocław University, **Wrocław**, Poland.
84. February 29, 1992 – *Quaternionic Reduction and Einstein Manifolds*, The New Mexico Geometry and Topology Symposium, **Las Cruces**, New Mexico, USA.
85. February 12, 1991 – *Group Actions, Quotients, and Quaternionic Manifolds*, invited talk at SUNY@Stony Brook, **Stony Brook**, New York, USA.
86. January 27, 1991 – *Group Actions, Quotients, and Quaternionic Manifolds*, talk given at The Institute for Advanced Study, **Princeton**, New Jersey, USA.
87. May 14, 1990 – *Self-dual Einstein Metrics with Nonzero Scalar Curvature*, talk given at The University of **Warwick**, England.
88. August 25, 1989 – *Quotient Constructions of Special Riemannian Geometries*, colloquium at Odense University, **Odense**, Denmark.
89. August 23, 1989 – *Quotient Constructions of Special Riemannian Geometries*, seminar talk at the Danmarks Tekniske Høskole, **Copenhagen**, Denmark.
90. June 16, 1989 – *Generalized Symplectic Reduction*, seminar talk at the Max-Planck-Institut, **Bonn**, Germany.
91. February 21, 1989 – *Generalized Symplectic Reduction*, invited colloquium at University of California, **Santa Barbara**, California, USA.
92. December 8, 1988 – *New Metrics with $Sp(n) \cdot Sp(1)$ Holonomy*, invited colloquium at Tulane University, **New Orleans**, Louisiana, USA.

PUBLICATIONS

• Articles published or accepted for publication

1. *On η -Einstein Sasakian Geometry*, **Communications in Mathematical Physics** **262** (2006), 177-208; (with C. P. Boyer and P. Matzeu).
2. *Sasakian geometry Einstein metrics on spheres, Short Program on Riemannian Geometry*, 47-61, **CRM Proceedings & Lecture Notes**, **40**, AMS, Providence, RI, 2005; (with C. P. Boyer).
3. *Einstein metrics on spheres*, **Annals of Mathematics** **162** (2005), 557-580; (with C. P. Boyer and J. Kollár).
4. *Einstein metrics on exotic spheres in dimension 7, 11, and 15*, **Experimental Mathematics** **14** (2005), 61-66; (with C. P. Boyer, J. Kollár, and E. Thomas).
5. *Sasakian Geometry, Hypersurface Singularities, and Einstein Metrics*, **Rendiconti del Circolo Matematico di Palermo (2), Suppl. No. 75** (2005), 57-87; (with C. P. Boyer).
6. *Toric self-dual Einstein metrics as quotients*, **Communications in Mathematical Physics** **253** (2005), 337-370; (with C. P. Boyer, D. M. J. Calderbank, and P. Piccinni).
7. *On Positive Sasakian Geometry*, **Geometriae Dedicata** **101** (2003), 93-102; (with C. P. Boyer and M. Nakamaye).
8. *New Einstein Metrics on $8\#(S^2 \times S^3)$* , **Differential Geometry and Its Applications** **19** (2003); 245-251; (with C. P. Boyer).
9. *The Geometry of Sasakian-Einstein 5-Manifolds*, **Mathematische Annalen** **325** (2003), 485-524; (with C. P. Boyer and M. Nakamaye).
10. *Sasakian Geometry, Homotopy Spheres, and Positive Ricci Curvature*, **Topology** **42** (2003), 981-1002; (with C. P. Boyer and M. Nakamaye).
11. *Einstein Metrics on Rational Homology 7-Spheres*, **Annales de l'Institut Fourier** **52** (2002), 1569-1584; (with C. P. Boyer and M. Nakamaye).
12. *Rational Homology 5-Spheres with Positive Ricci Curvature*, **Mathematical Research Letters** **9** (2002), 521-528; (with C. P. Boyer).
13. *Sasakian-Einstein Structures on $9\#(S^2 \times S^3)$* , **Transactions of the American Mathematical Society** **354** (2002), 2983-2996; (with C. P. Boyer and M. Nakamaye).
14. *3-Sasakian Geometry, Nilpotent Orbits, and Exceptional Quotients*, **Annals of Global Analysis and Geometry** **21** (2002), 85-110; (with C. P. Boyer and P. Piccinni).

15. *New Einstein Metrics in Dimension Five*, **Journal of Differential Geometry** **57** (2001); 443-463; (with C. P. Boyer).
16. *Contact Geometry and Einstein Manifolds*, **Proceedings of the American Mathematical Society** **129** (2001), 2419-2430; (with C. P. Boyer).
17. *On Sasakian-Einstein Geometry*, **International Journal of Mathematics** **11** (2000), 873-909; (with C. P. Boyer).
18. *A Note on Contact Toric Geometry*, **Journal of Geometry and Physics** **35** (2000), 288-298; (with C. P. Boyer).
19. *3-Sasakian Manifolds*, Encyclopaedia of Mathematics, Supplement II, pp. 449-451, Kluwer Academic Publishers, (2000).
20. *3-Sasakian Manifolds*; Surveys in Differential Geometry VI: *Essays on Einstein Manifolds* A supplement to the Journal of Differential Geometry, pp. 123-184, (eds. C. LeBrun, M. Wang); International Press, Cambridge (1999); (with C. P. Boyer).
21. *Quaternionic geometry and 3-Sasakian manifolds*, Quaternionic structures in mathematics and physics (Trieste, 1994), 7-24 (electronic), Int. Sch. Adv. Stud. (SISSA), Trieste, (1998); (with C. P. Boyer and B. Mann).
22. *Hypercomplex Structures From 3-Sasakian Structures*, **Journal für die reine und angewandte Mathematik** **501** (1998), 115-141; (with C. P. Boyer and B. Mann).
23. *A Note on Smooth Toral Reductions of Spheres*, **Manuscripta Mathematica** **95** (1998), 149-158. (with C. P. Boyer and B. Mann).
24. *Compact 3-Sasakian 7-Manifolds with Arbitrary Second Betti Number*, **Inventiones Mathematicae** **131** (1998), 321-344; (with C. P. Boyer, B. Mann, and E. Rees).
25. *The Twistor Space of a 3-Sasakian Manifolds*, **International Journal of Mathematics** **8** (1997), 31-60; (with C. P. Boyer).
26. *Einstein Manifolds of Positive Scalar Curvature with Arbitrary Second Betti Number*, **Balkan Journal of Geometry and Its Applications** **1**, no. 2 (1996), 1-8. (with C. P. Boyer, B. Mann, and E. Rees).
27. *On Betti Numbers of 3-Sasakian Manifolds*, **Geometriae Dedicata** **63** (1996), 45-68; (with S. Salamon).
28. *On Strongly Inhomogeneous Einstein Manifolds*, **Bulletin of the London Mathematical Society** **28** (1996), 401-408; (with C. P. Boyer and B. Mann).
29. *Hypercomplex Structures on Stiefel Manifolds*, **Annals of Global Analysis and Geometry** **14** (1996), 81-105; (with C. P. Boyer and B. Mann).
30. *Some New Examples of Inhomogeneous Hypercomplex Manifolds*, **Mathematical Research Letters** **1** (1994), 531-538; (with C. P. Boyer and B. Mann).
31. *Geometry and topology of 3-Sasakian manifolds*, **Journal für die reine und angewandte Mathematik** **455** (1994), 183-220; (with C. P. Boyer and B. Mann).

32. *New Examples of Inhomogeneous Einstein Manifolds of Positive Scalar Curvature*, **Mathematical Research Letters** **1** (1994), 115-121; (with C. P. Boyer and B. Mann).
33. *3-Sasakian Manifolds*, **Proceedings of Japan Academy** vol. **69**, Ser. A, (1993), 335-340; (with C. P. Boyer and B. Mann).
34. *Quaternionic Quotients and Einstein Manifolds*, in **Communications in Analysis and Geometry** vol. **1**, no. 2, (1993), 1-51; (with C. P. Boyer and B. Mann).
35. *Nonzero Scalar Curvature Generalizations of the ALE Instantons*, **Journal of Mathematical Physics** **33** (1992), 1765-1771; (with T. Nitta).
36. *Geometry of the Scalar Couplings in $N = 2$ Supergravity Models*, **Classical and Quantum Gravity** **9** (1992), 27-40.
37. *Multicenter Metrics with Negative Cosmological Constant*, **Classical and Quantum Gravity** **8** (1991), 1529-1543.
38. *Duality and Yang-Mills Fields on quaternionic Kähler manifolds*, **Journal of Mathematical Physics** **32** (1991), 1263-1268; (with Y. S. Poon).
39. *Quaternionic Reduction and Quaternionic Orbifolds*, **Mathematische Annalen** **282** (1988), 1-21; (with B.H. Lawson, Jr.)
40. *A Generalization of Momentum Mapping Construction for Quaternionic Kähler Manifolds*, **Communications in Mathematical Physics** **108** (1987), 117-138.
41. *New Matter Couplings in $N=2$ Supergravity*, **Nuclear Physics B****289** (1987), 573-588.
42. *Hyperkähler and Quaternionic Kähler Nonlinear Sigma Models*, **Nuclear Physics B****271** (1986), 402-416.
43. *$CP(n)$ nonlinear sigma models with holomorphic constraints in $d=2,4$ dimensions*, **Physical Reviews D****29** (1984), 1809-1818.

- **Articles submitted for publication**

1. *Einstein metric on rational homology spheres*, submitted to the Journal of Differential Geometry; (with C. P. Boyer).
2. *Highly connected manifolds with positive Ricci curvature*, submitted to Geometry and Topology; (with C. P. Boyer).

- **To be submitted and in preparation**

1. *Constructions in Sasakian Geometry*, in preparation; (with C. P. Boyer and L. Ornea).
2. *Sasakian Manifolds*, research monograph for the Oxford University Press; in preparation (with C. P. Boyer).

3. *On Sasakian Futaki Invariants*, in preparation; (with C. P. Boyer and S. Simanca).
4. *Sasakian Geometry in Five Dimensions*, in preparation; (with C. P. Boyer).

Last updated: February 1, 2006