## **CURRICULUM VITAE**

NAME: Jean A. Larson

PRESENT POSITION: Professor

**HOME ADDRESS:** 

**BORN:** 

**DEGREES:** Ph.D., Dartmouth College – 1972

A.M., Dartmouth College – 1970

A.B., University of California, Berkeley – 1968

**RESEARCH INTERESTS:** Set Theory and Foundations

Combinatorics

#### PROFESSIONAL EXPERIENCE:

Professor (promoted 1987), University of Florida, 1974-Present

Associate Chair for Graduate Studies, 1993-96

Member, Mathematical Sciences Research Institute, Berkeley, Fall 1989

Visiting Professor, Pennsylvania State University, Fall 1988 and Spring 1990

Visiting Associate Professor, University of Colorado, Boulder, 1983-1984

Research Associate, University of California, Berkeley, 1977

E.R. Hedrick Assistant Professor, University of California, Los Angeles, 1972-1974

# **AWARDS:**

2007 Fall Anderson Scholar

1993 Teaching Improvement Program Award, \$5,000

1985-86 College of Liberal Arts and Sciences Certificate of Teaching Excellence

# **GRANTS:**

NSF Grant MCS-7903384, 1979-80.

NSF Grant DMS-8600931, 1986-89.

NSF Grant DMS-8704447, 1987, (Equipment).

NSF Grant DMS-902094, 1991-92, (Conference).

NSF Grant INT-9503676, 1995-98, (Conference).

with W. Mitchell, NSF Grant DMS-9626143, 1996-1999.

with W. Mitchell, NSF Grant DMS-9970536, 1999-2003.

NSF Grant DMS-0605727, Latin American Symposium on Mathematical Logic

XIII: Participant Support, 2006-2007

# **HONORARY SOCIETIES:**

Phi Beta Kappa

#### **ORGANIZATIONS:**

American Mathematical Society (AMS) Mathematical Association of America (MAA) Association for Symbolic Logic (ASL) Association for Women Mathematicians (AWM) National Council of Teachers of Mathematics (NCTM)

## REVIEWING & REFEREEING ACTIVITIES:

Reviewed papers for:

Annals of Pure and Applied Logic Combinatorica Electronic Journal of Combinatorics Fundamenta Mathematica Grants for the National Science Foundation Israel Journal Journal of Combinatorial Theory (A) and (B) Journal Symbolic Logic Order Pacific Journal Proceedings AMS Transactions AMS

### OTHER PROFESSIONAL ACTIVITIES:

One of a team of four presenters at a the PROMiSE Summer Institute on Algebra, July 12-23, 2010, providing professional development for around 40 teachers in grades 5-8 in connection with the North East Florida Educational Consortium.

One of a team of four presenters at a the PROMiSE Summer Institute on Rational Numbers and Proportional Reasoning, July 13-24, 2009, providing professional development for 40 teachers in grades 5-8 in connection with the North East Florida Educational Consortium.

Mathematics Review for Florida Department of Education's Project: Get Ready Fall 2008 Member, Association of Symbolic Logic Council 2006-2008

Chair, ASL Committee on Education, 1997-2003.

Reviewer, Florida Comprehensive Assessment Test (FCAT) Items for third grade level, May 2001.

ASL representative, Educational Partnership, Conference Board of Mathematical Sciences, 1996-1999.

Standing committee on Southeastern Logic Symposium, one of three, 1985-94. Judge, State Science and Engineering Fair, Regional or State Level 1992-1994.

# Conference Organizing Committees:

Program Committee for 2007 Annual Meeting of the Association for Symbolic Logic, Gainesville, Florida, March 10-13, 2007.

with M. Dzamonja, 2007 ASL Annual Meeting, Special Session: Connections of set theory with Boolean Algebras and topology, Gainesville

with J. Zapletal and A. Hajnal, Combinatorial Set Theory, September 2006, Gainesville

Organizing Committee for the UF Special Year in Logic (2006-2007), in particular, overseeing the web site for the special year.

Scientific Committee for XIII Simposio Latinoamericano de Lógica Matemática (SLALM XIII), Oaxaca, México, August 7-12, 2006.

Chair, Program Committee, 1999-2000 ASL Winter Meeting, Baltimore, 1998-2000. Organizer, ASL Annual Meeting Special Session: Computers in Logic Education, 2002.

The Erdos Legacy and Connections to Florida, Special Session Organizing Committee, AMS Meeting, Gainesville, 1999.

Local Arrangements Committee, 1999 AMS Southeastern Sectional Meeting, 1998-99.

Organizing committee for 1995 AMS Southeastern Sectional Meeting Special Session: Future Directions for the Mathematics Doctorate

Co-organizer, US-Venezuela Conference: Combinatorial Set theory and its Consequences, Curcao, 1995

Program Committee, 1996 ASL Winter Meeting, 1995-1996.

Local Arrangements Comm., ASL 1994 Annual Meeting, 1993-94, chair

AMS Southeastern Region Hour Speakers Committee 1991-1993

Southeastern Logic Symposium (chair 1985, 1991)

NSF Summer Conference on Graphs and Algorithms, 1987

#### MENTIONED IN LISTINGS:

Women in Combinatorics by Joan A. Hutchinson, Association of Women Mathematicians Newsletter, Vol. 7, No. 1, 1977.

# THESES AND DISSERTATIONS DIRECTED:

#### **DEPARTMENTAL SERVICE:**

Visitors Committee, Chair 2007-2010

Bylaws revision committee, Chair 2008-2009

Advisor for Elizabeth Thomas, MAT May 2007

Calculus textbook selection committee, 2007

Hiring Plan Committee 2002-2003

Logic Ph.D. Exam Committee 1986-present

Organized Logic Seminar, 1989-1993, 1997-2001, 2006-2008

Faculty Advisor for Graduate Math Association, 1997-2001

Focus on Math Teaching Committee, 1997-8

Linear Algebra Textbook Committee, 1993, 1997-8 Chair

Faculty Advisor for Noetherian Ring, 1996-1997

Chair Search Committee, 1992-1993, Chair

Library Committee, Chair, 1992-1993.

Graduate Coordinator, 1993-96.

Newsletter Editor, 1990-92

First Year Analysis Exam Committee, 1986

Steering Committee, 1981-82, 1984-85 (Assoc. Chair/Secretary 1985), 1991-92

Graduate Committee, 1984-85, 1993-94, 1998-99

Visitors and Colloquium Committee (Chair, 1981-1982), 1983-86, 1990-91

Committee on 1033, 1132L Grading Policies

Undergraduate Committee, 1978-1980 Undergraduate Major Study Committee, 1979-1980 Search & Screen Committees, 1978-81, (Chair 1983-84), 1985-86

#### **UNIVERSITY SERVICE:**

College Faculty Council, 2007-present, Associate Chair 2007-2008, Chair 2009-2010 Faculty Enhancement Opportunity Task Force (FEO) 2008-2010

Co-chair, Faculty Senate-Presidential Task Force on the Implementation of Shared Governance, 2005-2006

Master Plan Steering Committee 2004-2006

Ad Hoc Committee on Faculty Compensation 2005

Trustee of the University of Florida January 2003-May 2003

University Faculty Senate, 1975, 1984–1986, 1999-2004, Chair 2002–2003

Constitution Committee 2001-2004

Senate Nominating Committee 2001-2004

Provost fellow, Fall 2001

Curriculum Committee for College of Liberal Arts and Sciences 2000-2002

Search Committee, Associate Dean Academic Affairs, 1999

College TIP Committee, 1998

Search Committee, Associate Dean of Student Services/Acad. Advising, 1997-98

CLAS Graduate Committee, 1993-96.

University General Education Committee, 1994-1996

University Focus on Teaching Committee, 1994-1996

Search Committee for Associate Director of Physical Plant, 1994

Council on Teacher Education, 1985-92

Faculty Advisor to UF International Folkdancers, 1986-88

Student Conduct Committee, 1986

Science Library Advisory Committee, 1985-86

Committee on Faculty Sabbaticals, 1984

Committee to Advise Dean McGown on Graduate Fellowships

Search Committee for Head of Science Library, 1984

# TALKS, LECTURES, AND INVITED ADDRESSES AT MEETINGS & COLLOQUIA:

## Invited Addresses:

Partitions: problems and resources, 40 minute talk for the American Mathematical Society Special Session on Set Theory in Las Vegas, May 1, 2011.

Partitions and trees, hour talk for the Infinite and finite sets conference, Budapest, Hungary, June 16, 2011

Laver and Infinite Combinatorics, at the Mid-Atlantic Mathematical Logic Seminar in honor of Richard Laver, University of Colorado in Boulder, February 5, 2010.

Scattered Thoughts on Infinite Combinatorics, seminar of the Mittag-Leffler Institute in Stockholm, Sweden, November 17, 2009

A gentle introduction to some set theory techniques, a short course given at the School of Mathematical Logic, Oaxaca, Mexico, August 1-5, 2006

A partition theorem for a large Rado graph, Computational Prospects of Infinity, Singapore, June 30, 2005

Coloring Paths in the Random Graph, Mini-conference in Set Theory, Fields Institute, Toronto, Canada, March 4, 2005

A partition theorem for a large dense linear order, International Workshop on Set Theory, CIRM, Luminy, France, September, 2004.

An Introduction to Ordinal Partition Relations, Set Theory Days, Cambridge University, May 17, 2004.

Ramsey Theory for Countable Universal Binary Homogeneous Structures, Singular Cardinal Combinatorics (co-sponsored by the Pacific Mathematics Institute and the Mathematical Sciences Research Institute), Banff International Research Station, Banff, Canada, May 5, 2004.

Work/Life Balance: Policies and Practices at Academic Institutions, Project NExT (New Experiences in Teaching) Panel Discussion, Joint Mathematics Meetings, Phoenix, January 7, 2004.

Trees, Baumgartnerfest, sponsored by the Mid-Atlantic Model Theory Seminar at Dartmouth College, October 2003.

The Quasi Order of Graphs on an Ordinal, Set Theory Workshop, Institute for Formal Logic, Vienna, August, 2001.

Playing with Partitions, AMS Special Session, Las Vegas, April 2001.

Countable Ordinal Graphs and Complete Quadrilaterals, Workshop in Mengenlehre, Oberwolfach, December 1999.

Problems and Results for Ordinal Partitions, Mid-Atlantic Model Theory, Logic and Set Theory Meeting, Rutgers, October, 1999.

Arrow Relations and Ordinals, special session, Erdos Memorial Meeting, Budapest, July 1999.

Erdos and the University of Florida, AMS Special Session, Gainesville, 1999.

Unlocking Secrets of Sequences, Summer Program for Women, George Washington University, 1998.

Ordinal Graphs and Quadruples, CIRM, Luminy, France, 1998.

Set Theory Genealogy, AMS Special Session, Baltimore, 1998.

Future of the NCTM Standards, panel discussion, Baltimore, 1998.

Boise Extravaganza in Set Theory, 1996

Software Institute, Academica Sinica, Beijing, 1993

MAMLS/AMS Special Session, Lehigh University, Pennsylvania, 1992

NATO Conference on Finite and Infinite Combinatorics, Banff, Canada, 1991

UNESCO Summer School in Logic, Teheran, Iran, 1991

International Set Theory Workshop, Luminy, France, 1990

Conference on Infinite Graphs, St. John's College, Cambridge, England, 1989

MAMLS, University of Pennsylvania, 1989

Megenlehre, Oberwolfach, Germany, 1989, 1993, 1996

New England Set Theory Seminar, Smith College, 1988

Union College Set Theory Conference, Schenectady, 1988

Special Session, AMS Meeting, Atlanta, 1978

# Contributed talks (1988-2005):

Ordinal Partition Problems, Latin American Logic Symposium, SLALM XII, Costa Rica, January 12-16, 2004.

ASL European Summer Meeting, Leeds, 1997

Fifth Asian Logic Conference, National Univ. of Singapore, Singapore, 1993

NSF Workshop: Professors Rethinking Options in Mathematics Teaching, Humboldt State University, 1993

Mengenlehre, Oberwolfach, Germany, 1991

# Colloquium and Seminar talks:

Ben Gurion University, Be'er Sheva, Israel, 2004

Tel Aviv University, Tel Aviv, Israel, 2004

University of Toronto, 2004

University of Vienna, Austria, 2004

Dartmouth College, Hanover, 1986, 1990, 1999

University of California, Berkeley, 1973, 1977, 1996

University of Kansas, Lawrence, 1981, 1983, 1990, 1996

University of Wisconsin, Madison, 1996

Boise State University, 1991

Nanjing University, China, 1993

Yangzhou University, China, 1993

Pennsylvania State University, 1987, 1988, 1990

UCLA, 1974, 1977, 1988

University of Colorado, Boulder, 1976, 1982, 1983

University of Calgary, 1982

# Chaired session:

## Boolean LAST

Second European Set Theory Meeting, July 2009

Ninth Luminy Workshop on Set Theory, October 2006

Conference on Set Theory, CRM in Barcelona, Spain, 2003

Seventh International Workshop on Set Theory, CIRM in Luminy, France, 2002.

Workshop in Mengenlehre, Oberwolfach, January 2002.

Sixth International Workshop on Set Theory, CIRM in Luminy, France, 2000.

Workshop in Mengenlehre, Oberwolfach, December 1999.

International Set Theory Workshop, CIRM, Luminy, France, 1998

International Set Theory Workshop, CIRM, Luminy, France 1994

Association of Symbolic Logic Meeting, Veszprem, Hungary, 1992

Association of Symbolic Logic Meeting, Penn State, 1990

Southeastern Logic Symposium, Charleston, South Carolina, 1987

#### **REVIEW:**

1. S.B. Grantham, Galvin's "racing pawns" game and a well- ordering of trees, Memoirs of the AMS, no. 316, AMS, Providence 1985, iv +63 pp., J. Symbolic Logic, **55** (3) 1310-1311.

## **PUBLICATIONS:** (Published, accepted, submitted)

- 1. A short proof of a partition relation for the ordinal  $\omega^{\omega}$ , Annals of Math Logic **6 (2)** (1973), 129-145.
- 2. Partition theorem for certain ordinal products, Colloquia Mathematica Socitatis Janos Bolyai 10, Infinte and Finite Sets, Keszthely (Hungary) (1973), 1017-1024.
- 3. (with F. Galvin), *Pinning countable ordinals*, Fund. Math., LXII (1975), 357-361.
- 4. A solution for scattered order types of a problem of Hagendorf, Pacific J. of Math. 74 (2) (1978), 373-379.
- 5. Some graphs with chromatic number three, J. Combinatorial Theory (B) **26** (3) (1979), 317-322.
- 6. An independence result for pinning for ordinals, J. London math. Soc., (2) 19 (1979), 1-6.
- 7. (with J. Baumgartner, P. Erdos and F. Galvin), Colorful partitions of cardinal numbers, Canadian J. of Math. 21 (3) (1979), 1-12.
- 8. (with P. Erdos and V. Faber), Sets of natural numbers of positive density and cylindric set algebras of dimension 2, Alg. Universalis 11 (1979), 1-12.
- 9. Pinning for pairs of countable ordinals, Fund. Math., CVIII (1980), 7-21.
- 10. A counter-example in the partition calculus for an uncountable ordinal, Israel J. of Math., (36) **3,4** (1980), 287-299.
- 11. (with R. Laver and G. McNulty), Square-free and cube-free colorings of the ordinals, Pacific J., (89) 1 (1980), 137-141.
- 12. (with P. Erdos), On pairwise balanced designs with the sizes of the blocks as uniform as possible, Annals of Discrete Math. 15 (1982), 131-136.
- 13. The number of one-generated diagonal-free cylindric set algebras of finite dimension greater than two, Algebra Univ. 16 (1983), 1-16.
- 14. (with D.A. Drake), Pairwise balanced designs whose line sizes do not divide six, J. Combinatorial Theory Series A (34) 3 (1983), 266-300.
- 15. (with D.A. Drake), A quest for certain linear spaces on thirty points, J. Statistical Planning and Inference, Vol. 10 (1984), 241-255.
- 16. The number of finitely generated infinite cylindric set algebras of dimension two, Algebra Universalis 19 (1984), 5377-396.
- 17. The number of one-generated cylindric set algebras of dimension greater than two, J. Symbolic Logic, 50 (1) (1985), 59-71.
- 18. (with S. Dow, D. Drake, Z. Furedi), A lower bound for the of a maximal family of mutually intersecting sets of equal size, Congressum Numeratum 48 (1985), 47-48.
- 19. A consequence of no short scale for ordinal graphs with no infinite path, J. London Math. Soc., (2) **33** (1986), 193-202.
- 20. A GCH example of an ordinal graph with no infinite path, Transactions AMS, 303 (1) (1987), 383-393.
- 21. (with J. Baumgartner), A Diamond example of an ordinal graph with no infinite path, Annals of Pure and Applied Math., 47 (1) (1990), 1-10.

- 22. Martin's Axiom and ordinal graphs: large independent sets or infinite paths, Annals of Pure and Applied Math., 47 (1) (1990), 31-39.
- 23. (with P. Erdös), Matchings from a set below to a set above, Discrete Math. 95 (1991), 169-182.
- 24. (with D. A. Drake), The non-existence of certain projective planes of Order 15, Experimental Mathematics 1, No.1 (1992), 65-69.
- 25. Some canonical partition ordinals, Finite and Infinite Combinatorics in Sets and Logic, NATO ASI Series C: Mathematical and Physical Sciences **411** (1993), 207-224.
- 26. (with P. Erdös, A. Hajnal), Ordinal Partition Behavior of Finite Powers of Cardinals, Finite and Infinite Combinatorics in Sets and Logic, NATO ASI Series, Series C: Mathematical and Physical Sciences 411 (1993), 207-224.
- 27. (with W.J. Mitchell), On a problem of Erdös and Rado, Annals of Combinatorics, 1 3 (1997), 245-252.
- 28. An ordinal partition from a scale, in: Set Theory: Techniques and Applications, (C. Di Prisco, J. Larson, J. Bagaria, A. Mathias, eds.) (1998), 109-125.
- 29. A picaresque approach to set theory genealogy, Set Theory: Techniques and Applications, (C. Di Prisco, J. Larson, J. Bagaria, A. Mathias, eds.), (1998), 127-155.
- 30. (with C. Di Prisco, J. Bagaria, and A. Mathias), Set Theory: Techniques and Applications, Kluwer Academic Publishers, Dordrecht, 1998.
- 31. An ordinal partition avoiding pentagrams, Journal of Symbolic Logic 65 (3) (2000), 969-978.
- 32. (with C. Darby), Multicolored Graphs on Countable Ordinals of Finite Exponent, DIMACS Ser. Discrete Math. Theoret. Comput. Sci. **58** (2002), 31–43.
- 33. Erdős and Ordinals,, in: Paul Erdos and his Mathematics II, (G. Halász, L. Lovász, M. Simonovits and Vera T. Sós, eds) Bolyai Society Math. Studies 11 (2002), 427-451.
- 34. Ramsey Theory for Countable Binary Homogeneous Structures, Notre Dame Journal of Formal Logic 46 (2005), 335-352.
- 35. Partition relations on a plain product order type, Annals of Pure and Applied Logic, 144, (2006), no. 1-3, 117-125.
- 36. Counting Canonical Partitions in the Random Graph,, Combinatorica 28 No. 6, (2008), 659-678.
- 37. (with Mirna Dzamonja and Bill Mitchell), A partition theorem for a large dense linear order, Israel Journal of Mathematics, 171 (1) (2009), 237-284.
- 38. (with Mirna Dzamonja and Bill Mitchell), Partitions of large Rado graphs, Archive for Mathematical Logic, 48 (6) (2009), 579-606.
- 39. (with A. Hajnal), *Partition Relations*, in: Handbook of Set Theory, (M. Foreman, A. Kanamori, eds), **1** (2010), 129-213.
- 40. (with P. Komjath and N. Sauer), The quasi order of graphs on an ordinal, Discrete Mathematics **311** (15) (2011), 1451-1460.
- 41. *Infinite combinatorics*, in: Sets and Extensions in the Twentieth Century, (D. Gabbay, A. Kanamori, J. Woods, eds), a volume of the series Handbook of the History of Logic, (2011), 146-357.
- 42. (with K. Kunen and J. Steprans), Continuous maps on Aronszajn trees, Order DOI: 10.1007/s11083-011-9205-5 (online March 10, 2011).