

**Larry J. Langley**

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EDUCATION

- |      |  |                   |
|------|--|-------------------|
| 1993 | Dartmouth College                              | Ph.D. Mathematics |
|      | Dissertation: Tolerance Orders and C-Dimension |                   |
|      | Advisor: Kenneth P. Bogart                     |                   |
| 1990 | Dartmouth College                              | A.M. Mathematics  |
| 1988 | University of California, Santa Cruz           | B.A. Mathematics  |
|      | Regents Scholar, Honors in Major               |                   |

PROFESSIONAL EXPERIENCE

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|--------------|--|
| 2015–present | Department Chair, Department of Mathematics                  |
| 2006–present | Associate Professor, University of the Pacific               |
| 2001–2006    | Assistant Professor, University of the Pacific               |
| 1995–2001    | Lecturer, University of the Pacific                          |
| 1997–2001    | Instructor, American River College                           |
| 1993–1995    | Visiting Assistant Professor, University of Colorado, Denver |
| 1988–1993    | Teaching Fellow, Dartmouth College                           |

REFEREED PUBLICATIONS COAUTHORED WITH UNDERGRADUATES

- 2006 Domination parameters and Gallai-type theorems for directed trees. *Ars Combinatoria* **81**: 201-207 (with J. Albertson, A. Harris, and S.K. Merz).
- 2002 Alpha-domination in tournaments and digraphs *Congressus Numerantium* **157**: 213-218 (with S.K. Merz, D. Stewart, and C. Ward).

REFEREED PUBLICATIONS

- 2015 Set chromatic number of a digraph, to appear *JCMCC* (with Sarah K. Merz)
- 2015 Kings and Heirs: A Characterization of the (2,2)-Domination Graphs of Tournaments, to appear, *Discrete Applied Mathematics* (with Kim A.S. Factor)
- 2012 Bipartite Unit Probe Interval Graphs, *Australasian Journal of Combinatorics*, 52, 19-31 (with David E. Brown)
- 2011 A characterization of connected (1, 2)-domination graphs of tournaments. *AKCE International Journal of Graphs and Combinatorics*, **8**, no 1, 51-56 (with Kim A. S. Factor).
- 2010 Digraphs with isomorphic underlying and domination graphs:  $UG^c(D) = C_4 \cup P_i \cup P_j$ , *Australasian Journal of Combinatorics*, **48**: 25–41 (with Kim A. S. Factor).
- 2009 An introduction to (1,2)-domination graphs. *Congressus Numerantium*, **199**: 33–38 (with Kim A. S. Factor)
- 2009 Probe interval orders. *The Mathematics of Preference, Choice and Order: Essays in Honor of Peter C. Fishburn*, Springer, 313–322 (with David E. Brown)
- 2008 Characterization of digraphs with equal domination graphs and underlying graphs. *The Journal of Discrete Mathematics* **308**, no 1: 34–43, (with Kim A. S. Factor).
- 2007 Digraphs with isomorphic underlying and domination graphs: Pairs of paths in  $UG^c(D)$ . To Appear *The Journal of Combinatorial Mathematics and Combinatorial Computing* (with Kim A. S. Factor).
- 2007 Digraphs with isomorphic underlying and domination graphs: Connected  $UG^c(D)$ . *Discussiones Mathematicae Graph Theory* **27(1)**: 51-68, (with Kim A. S. Factor).

- 2007 Alliances in directed graphs. *The Journal of Combinatorial Mathematics and Combinatorial Computing* **61**: 149-158 (work supported by an Eberhardt Research Grant at U.O.P.)
- 2006 Digraphs with isomorphic underlying and domination graphs: Components of  $K_1$ ,  $K_2$ , or  $C_4$  in  $UG^c(D)$ . *Congressus Numerantium* **174**: 73-82 (with Kim A. S. Factor).
- 2003 The number of alpha-dominating sets in tournaments. *Congressus Numerantium* **162**: 183-192 (with S.K. Merz).
- 2001 Tolerance orders and bipartite unit tolerance graphs, *Discrete Mathematics* **226**: 35-50 (with K.P. Bogart, M.S. Jacobson, F.R. McMorris).
- 1997  $P_3$ -connected graphs of minimum size, *Ars Combinatoria* **47**:299-306 (with D.C. Fisher and K. Fraughnaugh).
- 1997 The  $p$ -competition graphs of strongly connected and Hamiltonian digraphs, *Ars Combinatoria* **47**:161-172 (with J.R. Lundgren, P.A. McKenna, S.K. Merz, and C.W. Rasmussen).
- 1997 Posets with interval or chordal strict upper and lower bound graphs, *Congressus Numerantium* **125**:153-160 (with S.K. Merz, J.R. Lundgren, and C.W. Rasmussen).
- 1997 The number of dependent arcs in an acyclic orientation, *Journal of Combinatorial Theory, Series B* **71**:1:73-78 (with D.C. Fisher, K. Fraughnaugh, and D.B. West).
- 1995 On  $C_5$ -saturated graphs with minimum size, *Congressus Numerantium* **112**:45-48 (with D.C. Fisher and K. Fraughnaugh).
- 1995 The competition graphs of interval digraphs, *Congressus Numerantium* **107**:37-40 (with S.K. Merz and J.R. Lundgren).
- 1995 Irreflexive and reflexive dimension, *Discrete Applied Mathematics* **60**(1-3): 267-273.
- 1995 A recognition algorithm for orders of interval dimension two, *Discrete Applied Mathematics* **60**(1-3): 257-266.
- 1995 Proper and unit tolerance graphs *Discrete Applied Mathematics* **60**(1-3): 257-266 (with K.P. Bogart, P.C. Fishburn, G. Isaak).
- 1994 New classes of  $p$ -competition graphs and phi-tolerance competition graphs, *Congressus Numerantium* **100**:3-10 (with C.A. Anderson, J.R. Lundgren, P.A. McKenna, and S.K. Merz).
- 1994 A note on bipartite interval tolerance graphs, *Congressus Numerantium* **102**: 191-192.

#### INVITED PRESENTATIONS

- 2013 *Graphs and DNA, A history of interval graphs*, Rose Hulman University.
- 2013 *Graphs and DNA, A history of interval graphs*, Utah State University
- 2010 *Graphs and DNA*, Sonoma State University, California.
- 2005 *Digraphs with Isomorphic Domination Graphs and Underlying Graphs*, Marquette University, Wisconsin.
- 2003 *Defensive Alliances in Directed Graphs*, AMS Joint Western and Central Sectional Meeting, Boulder, Colorado.
- 2002 *The number of minimum  $\alpha$ -dominating sets in tournaments*, Discrete Mathematics Colloquium Series, University of Colorado, Denver
- 1992 *Unit and proper tolerance graphs*, Data Analysis Seminar, Technische Hochschule Darmstadt, Germany
- 1992 *Unit and proper tolerance graphs*, Technische Universitat, Berlin, Germany
- 1991 *The Predecessor successor relation of a partially ordered set*, Aridam VI, Advanced Research Institute in Discrete Applied Mathematics, Rutgers Center for Operations Research

#### OTHER CONFERENCE PRESENTATIONS, CONTRIBUTED TALKS

- 2014 45th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2013 AMS-MAA Joint Meetings, San Diego
- 2012 43rd Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2011 AMS-MAA Joint Meetings, New Orleans
- 2010 41st Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2010 AMS-MAA Joint Meetings, San Francisco
- 2009 AMS-MAA Joint Meetings, Washington D.C.
- 2008 39th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2006 SIAM Conference on Discrete Mathematics
- 2006 AMS-MAA Joint Meetings, San Antonio
- 2005 36th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2004 35th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2003 34th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2002 33rd Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 2002 AMS-MAA Joint Meetings, San Diego
- 1996 27th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Louisiana State University.
- 1995 Rocky Mountain Mathematics Consortium Summer Conference on Discrete Mathematics, Combinatorics, and Graph Theory, University of Wyoming.
- 1995 AMS-MAA Joint Meetings, San Francisco
- 1995 26th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 1994 AMS-MAA Joint Meetings, Cincinnati
- 1994 ORDAL, First International Conference on Orders and Algorithms, Lyon, France.
- 1994 25th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 1993 AMS-MAA Joint Meetings, San Antonio
- 1993 Conference on Combinatorics and Graph Theory, Smith College
- 1992 Sixth SIAM conference on Discrete Mathematics, University of British Columbia
- 1992 Aridam VII, Advanced Research Institute in Discrete Applied Mathematics, Rutgers Center for Operations Research
- 1992 23th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Florida Atlantic University.
- 1992 AMS-MAA Joint Meetings, Baltimore