

Henry E. Escudro

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EDUCATION

- 2006 Ph.D. in Mathematics, Western Michigan University, Kalamazoo, MI.
Area: Graph Theory
Title of Doctoral Dissertation: Detectable Colorings of Graphs
- 1997 M.S. in Mathematics, Ateneo de Manila University, Philippines.
Area: Graph Theory
- 1994 B.S. in Mathematics, Ateneo de Manila University, Philippines.

TEACHING AND RELATED EXPERIENCE

2006-present Assistant Professor, Juniata College, Huntingdon, PA.

Taught Linear Algebra, Quantitative Methods, Calculus I and III. Will teach Nature of Math and Geometry in Spring '08.

2001-2006 Doctoral Teaching Associate, The Graduate College, Western Michigan University, Kalamazoo, MI.

Taught independent classes of Mathematical Proofs, Calculus I, Precalculus, and Algebra II.

1997-2001 Instructor, Ateneo de Manila University, Philippines.

Taught Graph Theory, Combinatorics, Elementary Linear Algebra, Elementary Number Theory, Calculus III, Calculus II, Calculus I, Precalculus, Applied Calculus for Business, Calculus for Economists, Finite Mathematics, and Intermediate Algebra.

Committee member of Master thesis. Wrote the draft of the Mission/Vision of the Mathematics Department. Helped organize conferences hosted by the Mathematics Department.

Contributed questions to the Ateneo College Entrance Test. Served as examiner for the Ateneo College Entrance Test.

1999-2000 Officer-in-Charge, Mathematics Department, Ateneo de Manila University, Philippines.

1994-1995 Assistant Instructor, Ateneo de Manila Universtiy, Philippines.

Taught Calculus I, Calculus for Economists, Finite Mathematics, Intermediate Algebra, and Elementary Algebra.

GRANTS, HONORS AND AWARDS

Member, Pi Mu Epsilon Honor Society.

Member, Phi Kappa Phi Honor Society.

Project NExT Fellow, 2007-2008.

Graduate Research Travel Grant, The Graduate College, Western Michigan University, 2006.

Graduate Research Scholar Award, Mathematics Department, Western Michigan University, 2005.

Charles H. Butler Excellence in Teaching Award, Mathematics Department, Western Michigan University, 2004.

Graduate Research Travel Grant, The Graduate College, Western Michigan University, 2004.

ACTIVITIES RELATED TO RESEARCH

PUBLICATIONS

1. Circulants and a Three-Color Conjecture. H. Escudro, F. Okamoto, and P. Zhang, *Congressus Numerantium* 178 (2006) 33 - 35.
2. Detectable Colorings of Graphs. G. Chartrand, H. Escudro, F. Okamota, and P. Zhang, *Utilitas Mathematica* 69 (2006) 13 - 32.
3. On Detectable Factorizations of Cubic Graphs. H. Escudro, F. Okamoto, and P. Zhang, *The Journal of Combinatorial Mathematics and Combinatorial Computing* 56 (2006) 47 - 63.
4. Extremal Problems on Detectable Colorings of Connected Graphs with Cycle Rank 2. H. Escudro and P. Zhang, *AKCE International Journal of Graphs and Combinatorics* 2 No. 2 (2005) 99 - 117.
5. On Detectable Colorings of Graphs. H. Escudro and P. Zhang, *Mathematica Bohemica* 130 (2005) 427 - 445.

6. Detour Distance in Graphs. G. Chartrand, H. Escudro, and P. Zhang, *The Journal of Combinatorial Mathematics and Combinatorial Computing* 53 (2005) 75-94.
7. Extremal Problems in Graphs. G. Chartrand, H. Escudro, and P. Zhang, *Congressus Numerantium* 167 (2004) 133 - 147.
8. Wide-diameter of Generalized Undirected de Bruijn Graphs $UG_B(n, n^2)$. H. Escudro and F. Muga, *Proceedings, 1997, International Symposium on Parallel Architectures, Algorithms and Networks (ISPAN '97)* 417 - 420.
9. A Three-Color Problem in Graph Theory. H. Escudro, F. Okamoto, and P. Zhang. *Bulletin of the Institute of Combinatorics and Its Applications*. Accepted.
10. Extremal Problems on Detectable Colorings of Trees. H. Escudro and P. Zhang. *Discrete Mathematics*. Accepted.
11. A Three-Color Theorem on Graphs of Cycle Rank 2. H. Escudro, F. Okamoto and P. Zhang. Submitted.

PRESENTATIONS AT PROFESSIONAL MEETINGS

1. Vertex-Distinguishing Colorings of Graphs – A Survey, Thirty-Eight Southeastern International Conference on Graph Theory, Combinatorics and Computing, Florida Atlantic University, Boca Raton, FL, March 2007.
2. Some Results on the Detection Number of Graphs. Joint Annual Meeting Michigan Section – Mathematical Association of America and Michigan Mathematical Association of Two-Year Colleges, Calvin College, Grand Rapids, MI, May 2006.
3. Distinguishing Vertices Through Edge Coloring, The Thirty-Seventh Southeastern International Conference on Graph Theory, Combinatorics and Computing, Florida Atlantic University, Boca Raton, FL, March 2006.
4. On Detectable Colorings of Graphs. AMS-MAA Joint Meetings, San Antonio, TX, January 2006.
5. Some Results On Detour Distance in Graphs, Midwest Graph Theory Conference XL, Saginaw Valley State University, Saginaw Valley, MI, March 2005.
6. On Detour Distance in Graphs, The Thirty-Fifth Southeastern International Conference on Graph Theory, Combinatorics and Computing, Florida Atlantic University, Boca Raton, FL, March 2004.
7. Properties of Generalized Undirected de Bruijn Graphs $UG_B(2, 2^d)$, Mathematical Society of the Philippines Annual Convention, University of the Philippines Visayas, Miag-ao, Iloilo, Philippines, May 1997.

OTHER PRESENTATIONS

1. Distinguishing Vertices of a Graph, Mathematics Colloquium, Naval Postgraduate School, Monterey, CA, August 2007.
2. The Chinese Postman, Traveling Salesman and Spanning Tree Problems, Mathematics Colloquium, Juniata College, Huntingdon, PA, May 2006.
3. Extremal Problems on Detectable Colorings of Graphs, Graph Theory Seminar, Western Michigan University, Kalamazoo, MI, October 2005.
4. Weighted Graphs, High School Seminar, Battle Creek Math and Science Center, Battle Creek, MI, October 2005.
5. Detectable Colorings of Graphs, Graph Theory Seminar, Western Michigan University, Kalamazoo, MI, April 2005.

CONFERENCES, SEMINARS AND WORKSHOPS ATTENDED

Mathfest, San Jose, CA, August 2007.

AMS-MAA Joint Meetings, New Orleans, LA, January 2007.

The Thirty-Fourth Southeastern International Conference on Graph Theory, Combinatorics and Computing at Florida Atlantic University, Boca Raton, FL, March 2003.

OTHER

Refereed for Discrete Mathematics and Ars Combinatorica

Experience with the use of Derive, L^AT_EX, Microsoft Office, Maple and Minitab.

Familiar with Windows and Macintosh operating systems.