



## **Emil Daniel Schwab**

**Associate Professor of Mathematics - University of Texas at El Paso**

### **PRESENTATIONS/TALKS:**

#### **Mathematics:**

1. *Characterizations of prime numbers using arithmetic functions*, MathFest 2009 Portland-Oregon, Aug. 6-8, 2009
2. *A partial order on bipartite graphs with  $n$  vertices*, APHS 2009, "Actual Trends and Perspectives in Hard and Soft", 5-th edition, May 28-29, 2009, Tibiscus University, Romania
3. *Occurrences of Fibonacci and Thue-Morse words*, 3<sup>rd</sup> Joint NMSU/UTEP Workshop on Mathematics and Computer Science, New Mexico State University Las Cruces, April 26, 2008
4. *Coordinates pairs of Fibonacci and Thue-Morse words*, CombinaTexas Conference: Combinatorics in the South-Central U.S., University of Texas at El Paso, April 19-20, 2008
5. *Multichannel image decomposition by using pseudo-linear Haar wavelets*, 2007- IEEE International Conference on Image Processing (Special Session: soft computing in image processing, recent advances) San Antonio, Texas, Sept. 16-19, 2007
6. *On the combinatorial inverse monoid  $IO_3$* , XA 2006 European Conference on Computer Sciences & Applications, 1st edition, Timisoara, Romania, June 2<sup>nd</sup>-4<sup>th</sup>, 2006.
7. *McAlister semigroups and their application in formal languages*, Sequence of Lectures, Tibiscus University of Timisoara, Romania, June 15-22, 2005
8. *Abstract Möbius-division categories are reduced standard division categories of combinatorial inverse monoids*, International Symposium "Actual Trends and Perspectives in Hard and Soft", Tibiscus University of Timisoara, Romania, May 26-27, 2005
9. *Algebraic characterizations of exponential series*, Annual Meeting, Southwestern Section of the MAA, UTEP, El Paso, April 1-2, 2005
10. *A combinatorial research on inverse monoids via the theory of Möbius functions*, CombinaTexas Conference: Combinatorics in the South-Central U.S., Texas State University – San Marcos, February 25-26, 2005.
11. *Combinatorics on inverse semigroups*, Department of Mathematical Sciences, Colloquium, The University of Texas at El Paso, Feb. 11, 2005

12. *A characterization of prime numbers*, Annual Meeting Southwestern Section of the MAA and ArizMATYC, Northern Arizona University, Flagstaff, April 2- 3, 2004.
13. *A path through the set of numbers*, EPCC-Faculty Development Workshop El-Paso, Aug.18, 2003
14. *The Möbius category of a semilattice of finite groups*, Combinatorics 2002, Maratea (Potenza), Italy, June 2-8, 2002
15. *The Möbius function of a monomorphic and epimorphic triangular category*, CombinaTexas Conference: Combinatorics in the South-Central U.S., University of North Texas, March 29-31, 2002
16. *Monomorphic triangular categories*, Algebra Symposium "Babes-Bolyai" University of Cluj-Napoca, Romania, Nov. 23-24, 2001
17. *Möbius categories. Applications (formal power series, lattice-triangular categories, semilattice of groups)*, Colloquium-Math. Dept. University of Texas at El Paso, July 9, 2001
18. *Welcome to the world of numbers I*, Colloquium-Math. Dept. University of Texas at El Paso, March 28, 2001
19. *Characterizations of some class of formal power series*, Combina Texas conference: Combinatorics in the South-Central U.S., Texas A&M University, March 23-25, 2001
20. *On a representation of combinatorial triangular families of numbers by special Möbius categories*, Combina Texas conference: Combinatorics in the South-Central U.S., Texas A&M University, March 23-25, 2001
21. *On triangular categories II*, Research Seminar, University of Texas at El Paso, USA, Oct. 29, 1998
22. *On triangular categories I*, Research Seminar, University of Texas at El Paso, USA, Oct.22, 1998
23. *Convolutions and arithmetic functions*, PAMM's 119 Conference, Kosice Herlany, Slovakia, Oct. 23-26, 1997
24. *Arithmetic functions and regular convolutions* International Conf. of Appl. Math CAIM'97, Oradea, Romania, Oct. 17-19, 1997
25. *An embedding in the ring of formal power series*, 118-th PAMM Conference, Padova, Italy, Aug. 1997
26. *O teorema de scufundare, (An embedding theorem)* Annual Session of Scientific Communications, Univ. of Oradea, Romania, May 30-31, 1997
27. *Some properties of formal power series*, 117-th PAMM Conference, Balatonalmadi, Hungary, May 8-11, 1997
28. *On triangular categories*, Communications Session, University of Baia-Mare, Romania, Oct. 18-20, 1996
29. *Dinamici categoriale,(Categorical Dynamics)* International Congress "Actual Trends in Cybernetics and Philosophy of Science", Oradea, Ro, Oct. 17-19, 1996
30. *Calculus of fractions in special categories*, 116-th PAMM Conference, God Hungary, Oct. 10-13, 1996

31. *The incidence algebra of a triangular category and calculus of fractions*, Combinatorics'96 in honour of Giuseppe Tallini, Assisi-Perugia, Italy, Sept. 8-14, 1996
32. *On triangular categories*, 4-th Conference on Applied and Industrial Math., Chisinau (Moldova) 6-8 aug.1996- Oradea (Ro) 16-18 aug.1996
33. *Möbius categories and inverse categories*, PAMM's 114-th Conference Balatonalmadi, Hungary, 1-5 May 1996
34. *Calcul de fractii in categorii speciale (Calculus of fractions in special categories)*, Annual Session of Scientific Communications, University of Oradea, Romania, June 2-4, 1995
35. *On incidence algebra associated to a Möbius category*, 11-th Romanian National Conference of Algebra, Univ. of Constanta, Sept. 22-25 1994
36. *Categorii Möbius de tip binomial, (Möbius Categories of Binomial Type)* Annual Session of Scientific Communications, University of Oradea, Romania, May 26-28, 1994
37. *Asupra categoriilor de ordonare, (On Order Categories)* The fifth Symp. of Math. and its Appl. Research Centre of Romanian Academy and Technical University of Timisoara, Oct. 28-31, 1993
38. *Regular convolutions*, 105-th International Conference of Applied Mathematical Meetings, Univ. of Athens, Greece, Sept. 1993
39. *Möbius categories*, The 104-th PAMM-Conference, Debrecen, Hungary, July 10-14, 1993
40. *Asupra inelelor seriilor formale, (On the ring of formal power series)* Annual Session of Scientific Communications, University of Oradea, May 1993
41. *Aplicatii ale formelor biliniare extinse, (Applications of extended bilinear forms)* 10-th National Conference of Algebra, University of Timisoara, Romania, Sept. 21-23, 1992
42. *Total aditivitate (Complete Additivity)*, Annual Session of Scientific Communications, University of Oradea, Romania, May 29-30, 1992
43. *Definitii echivalente ale multiplicativitatii in algebre incidente reduce, (Equivalent Definitions of multiplicativity in reduce incidence algebras)* The 9-th National Conference of Algebra, University "Babes-Bolyai" of Cluj-Napoca, Romania, Sept. 18-20, 1991
44. *Aditivitate. Multiplicativitate in categorii Möbius (Additivity and Multiplicativity in Möbius Categories)*, The First Session of Scientific Communications Univ. of Oradea, 6-8 June 6-8, 1991
45. *Total aditivitate, (Complete Additivity)* The 8-th Romanian National Conference of Algebra, University of Iasi, October 24-27, 1990
46. *Multiplicite dans les categories de Möbius*, International Conference "Algebra and Algebraic Geometry" University of Bucharest, July 3-8, 1989
47. *Convolutie si multiplicativitate, (Convolution and Multiplicativity)*, Iasi, National Conference in Math, Romania, June 2-3, 1989

48. *Subgrupuri ciclice ale grupului functiilor aritmetice multiplicative. Aplicatii in combinatorica, (Cyclic Subgroups of the Group of Multiplicative Arithmetic Functions. Applications in Combinatorics)* Romanian National Conference of Algebra, University of Brasov, June 9-10, 1988

**Teaching Related:**

49. *Cross-Institutional Implementation of Supplemental Instruction*, MathFest 2009, Portland-Oregon, Aug. 6-8, 2009 (co-presenter)
50. *Peer-Led Supplemental Instruction for Calculus*, The International Sun Conference on Teaching and Learning, El Paso, February 27, 2009 (with the students: O.Marcedo and M.Fuentes)
51. *Modular Delivery and Supplemental Instruction (SI) for the Calculus Course*, 28-th Annual Conference on the First-Year Experience, Orlando-Florida, February 6-10, 2009 (with H. Knaust)
52. *Modular Delivery and Peer-Led Team-Learning for Precalculus*, AMS-MAA Joint Mathematics Meetings, Washington DC, January 5-8, 2009 (co-presenter)
53. *How to Increase the Pass Rate in Calculus Dramatically*, The International Sun Conference, UTEP, El Paso, Texas, USA, March 3-4, 2006.(with N. Marcus)