LATTICE PATH COMBINATORICS AND APPLICATIONS 2010

PROGRAM

The work sessions will be located in the Aula Magna of S. Chiara College

Sunday 4 July

17:00-19:30   Registration in Refugio Residence

19:30   Welcome Cocktail in Refugio Residence

Monday 5 July

8:00-8:30   Registration in S. Chiara College

8:30-8:45   Welcome

8:45-9:30   Plenary lecture: Some new self-avoiding walk and polygon models, A.Guttmann

Chair session: *Srecko Brlek*

9:30-9:50   Lattice path enumeration and Toeplitz matrices, S. Felsner, D. Heldt

9:55-10:15   Lattice path enumeration related to a paper by Hahrand Ringel, H. Prodinger

10:20-10:40   SLK-tilings obtained from lattice path enumeration, F. Bergeron, C. Reutenauer, A. Rodriguez

10:45 - 11:15 Coffee break

11:15 - 11:35 Binary words avoiding a pattern and marked succession rule, S. Bilotta, D. Merlini, E. Pergola, R. Pinzani

11:40 - 12:00 Lattice path enumeration for 321-avoiding permutations with further restrictions, M. Inuma, M. Hagiwara, M. Tomie

12:05 - 12:25 Local move connectedness of matchings of lattices with extra edges, F. Nakano, T. Sadahiro

12:30 - 14:00 Lunch

Chair session: Robert Cori

14:00 - 14:20   Every polyomino yields at most two square tilings, A. Blondin Massé, S.Brlek,
                A. Garon, S. Làbbé

14:25 - 14:45   Generalized tilings and Plucker cluster algebras, V. I. Danilov, A. V. Karzanov,
                G. A. Koshevoy

14:50 - 15:10   The uplift principle and new applications of the Riordan group, L. Shapiro

15:15 - 15:35   Explicit formulas for a sequence of binary tree polynomials, M. D'Adderio, A.
                M. Garsia

15:40 - 16:00   On the distributions of absorbed particles in crossing a field containing
                absorption points, C. Charalambides

16:05 - 16:35 Coffee break

16:35 - 16:55   On the number of collisions for the balls – and –urns problem with unequal
                probabilities, T. Nakata

17:00 - 17:20   On simsum and double simsun permutations avoiding a pattern of length three,
                W.-C. Chuang, S.-P. Eu, T.- S. Fu, Y.-J. Pan

17:25 - 17:45   Special Riordan arrays with lattice path interpretations, G.-S. Cheon, H. Kim

17:50-18:10   Half-lattice paths and virasoro characters, O. B. Fournier, P Mathieu, T. A.
                Welsh

20:30 Banquet in Refugio Residence

Tuesday 6 July

Chair session: Charalambos Charalambides

9:00 - 9:20   Non directed lattice paths on different lattices, C. Banderier

9:25 - 9:45   On lattice paths and open problems in automata theory, C. Haase, J. Ouaknine,
                J. Worrell

9:50 - 10:10   Visits to level r by Dyck paths, C. Brennan, S. Mavhungu

10:15-10:35   Strings in Dyck paths, K. Manes, A. Sapounakis, I. Tasoulas, P. Tsikouras

10:40 – 11:10 Coffee break

11:10 - 11:30   Counting strings in Ballot paths, <u>S. Sullivan</u>

11:35 - 11:55   Flip graphs, hyperplane arrangements and tableaux, <u>R. M. Adin</u>, Y. Roichman

12:00 - 12:20   Asymptotics for walks in a Weyl chamber of type b with a free end point, <u>T. Feierl</u>

12:25 - 12:45   A generating function for totally symmetric plane partitions (TSPPs) with self-conjugate main diagonal, <u>A. Blecher</u>

12:50-14:20   Lunch

Chair session: Helmut Prodinger

14:20 - 14:40   Generating functions for bi-wall directed polygons, <u>S. Feretic</u>

14:45 -15:05   Generating functions of embedded trees and lattice paths, <u>M. Kuba</u>

15:10-15:30   Enumeration of specific classes of polycubes, J.M. Champarnaud, J.P. Dubernard, H. Jeanne

15:35-15:55   Variation statistics on compositions, M. Archibald, <u>A. Knopfmacher</u>, T. Mansour.

16:00-16:30   Coffee break

16:30-18:00   POSTER SESSION (Poster list at the end of this program)

19:00   Football Match

21:00   Typical Dinner in "Orto dei Pecci" (not included in the registration fee)

Wednesday 7 July

Chair session: Luis Shapiro

9:00-9:20   Bijective counting of involutive Baxter permutations, <u>E. Fusy</u>

9:25-9:45   On the number of cycles of the product of two cyclic permutations, R. Cori, <u>M. Marcus</u>, G. Schaeffer

9:50-10:10   Notes on the Inverse Motzkin Matrix, <u>H. Niederhausen</u>

10:15-10:35   Unrepetitive paths in Cayley digraphs and the repetition threshold, <u>A.Carpi</u>

10:40-11:10   Coffee break

11:10-11:30   On weakly intersecting pairs of sets, Z. Kirly, Z. L. Nagy, D. Plvlgyi, <u>M. Visontai</u>

11:35-11:55   Some remarks on Rothe numbers (aka generalized Catalan numbers), <u>W. Panny</u>

12:00-12:20   A representation theorem for holonomic sequences, <u>T. Kotek</u>, J.A. Makowsky

12:25-12:45   On Kemp's confluent q-Chu-Vandermonde hypergeometric distributions and the associated q-meixner orthogonal polynomials, A. Kyriakoussis, M. Vamvakari

12:50 Works closure

13:30 Lunch in "La finestra" Restaurant (not included in the registration fee)

POSTER SESSION

1. On a Kolmogorov-Smirnov test for r samples counting paths in alcoves of affine Weyl groups, W. Boehm, K. Hornik

2. Asymptotic behaviour for the Kemp's confluent q-Chu-Vandermonde hypergeometric distributions, A. Kyriakoussis, M. Vamvakari

3. Semi-online machine cover in gunder a grade of service provision, Y. Wu, Q. Yang

4. Generator sets for the alternating group, A. Rotbart

5. Some simple bijections involving lattice walks and ballot sequences, M. A.A. vanLeeuwen

6. Bijections between lattice path and plane partitions, M. Alegri, E.H.M. Brietzke, J.P.O. Santos, R. Silva

7. Some graphs in C_f2 based on f-coloring, A. Adiwijaya, O. Serra, A.N.M. Salman, D. Suprijanto, E.T. Baskoro
8. Discrete analytic functions in complex spaces and Taylor expansion, O. Danilov, A. Mednykh
9. Lattice based A – isomorphism and its applications, S.-E. Han
10. Boys-and-girls birthdays and Hadamard products, O. Bodini, D. Gardy, O. Roussel
11. Stochastic stability of maximal independent sets, L. Boncinelli, P. Pin
12. Permutations tiling the plane, A. Blondin-Massé, A. Frosini, S. Rinaldi, L. Vuillon