Conference Program

Sunday, July 7

(A) Multivariate Moment-Related Inequalities
    Chair: Ingram Olkin, Stanford University
8:30 - 9:10 *On the Multi-Dimensional Moment Problem*
        J. H. B. Kemperman, Rutgers University
9:10 - 9:50 *Inequalities on Probabilities and Expectations Based on*
        the Knowledge of Multivariate Moments
        András Prékopa, Rutgers University
9:50 - 10:00 Discussion

10:00 -10:20 Coffee

(B) Inequalities in Probability
    Chair: Sheldon M. Ross, University of California at Berkeley
10:20 - 11:00 *Inequalities for Rare Events in Time Reversible*
        Markov Chains
        David J. Aldous, University of California at Berkeley
        and Mark Brown*, City College, CUNY
11:00 - 11:40 *Partitioning Inequalities in Probability and Statistics*
        Theodore P. Hill, Georgia Institute of Technology
11:40 - 11:50 Discussion

(C) Applications of Inequalities, I
    Chair: J. George Shanthikumar, University of California at Berkeley
1:30 - 2:10 *Comparing Two Groups of Ranked Objects by Matching Pairs*
        Herbert A. David* and Jingyu Liu, Iowa State University
2:10 - 2:50 *Applications of $\mu(F), \lambda(F)$ Inequalities*
        Chris Dorado* and Myles Hollander, Florida State University
2:50 - 3:00 Discussion

3:00 - 3:20 Coffee

(D) Inequalities in Multivariate Analysis
    Chair: Morris L. Eaton, University of Minnesota
3:20 - 4:00 *The Multivariate Correlation Inequality and Unbiased Tests*
        Arthur Cohen* and Harold B. Sackrowitz, Rutgers University
4:00 - 4:40 *Concentration Inequalities for Multivariate Distributions*
        Morris L. Eaton, University of Minnesota
        and Michael D. Perlman*, University of Washington
4:40 - 4:50 Discussion

8:00 - 10:00 **Wine and Cheese Reception**
　　　　　Patio - McMahon Hall

Monday, July 8

(E) Inequalities in Reliability Theory, I
　　Chair: Mark Brown, City College, CUNY
8:30 - 9:10 *Optimal Allocations in Additive Exponential Systems*
　　　　　Sheldon Ross, University of California at Berkeley
9:10 - 9:50 *Stochastic Comparisons for Maintenance Policies*
　　　　　Henry W. Block*, University of Pittsburgh,
　　　　　Naftali A. Langberg, University of Haifa
　　　　　and Thomas H. Savits, University of Pittsburgh
9:50 - 10:00 Discussion

10:00 -10:20 Coffee

(F) Univariate Moment-Related Inequalities
　　Chair: Yosef Rinott, University of California at San Diego
10:20 - 11:00 *Orderings Arising from Expected Extremes,*
　　　　　with an Application
　　　　　Peter J. Downey and Robert S. Maier*,
　　　　　University of Arizona
11:00 - 11:40 *Skewness and Kurtosis Orderings*
　　　　　Barry C. Arnold, University of California at Riverside
11:40 - 11:50 Discussion

(G) Extremal Problems and Covariance Inequalities
　　Chair: Michael D. Perlman, University of Washington
1:30 - 2:10 *Extremal Problems for Probability Distributions*
　　　　　Lutz Mattner, University of Hamburg
2:10 - 2:50 *Covariances of Symmetric Statistics*
　　　　　Richard A. Vitale, University of Connecticut
2:50 - 3:00 Discussion

3:00 - 3:20 Coffee

(H) Stochastic Orderings and Multivariate Majorization
Chair: Elja Arjas, University of Oulu
3:20 - 4:00 *Towards a Theory of Stochastic Functions*
with Applications to Stochastic Optimization
J. George Shanthikumar, University of California at Berkeley

4:00 - 4:40 *Multivariate Majorization by Positive Combinations*
Harry Joe, University of British Columbia
and Joseph S. Verducci*, Ohio State University
4:40 - 4:50 Discussion

Tuesday, July 9

(I) Optimal Stopping–Related Inequalities
Chair: David Gilat, Tel Aviv University
8:30 - 9:10 *Optimal Stopping Values and Prophet Inequalities*
for Negatively Dependent Random Variables
Yosef Rinott, University of California at San Diego
and Ester Samuel-Cahn*, Hebrew University
9:10 - 9:50 *Secretary Problems As a Source of Benchmark Bounds*
Stephen M. Samuels, Purdue University
9:50 - 10:00 Discussion

10:00 -10:30 Group Picture

10:30 -10:50 Coffee

(J) New Research Problems and Informal Presentations
Chair: Henry W. Block, University of Pittsburgh
10:50 - 11:50 Presenters:
Frans A. Boshuizen, Vrije Universeteit
Jiann–Hua Lou, National University of Singapore
Donald Richards, University of Virigina
Halong Zhu, University of Arizona

Afternoon: Open

Wednesday, July 10

(K) Convexity-Related and Majorization Inequalities
    Chair: Albert W. Marshall, University of British Columbia
8:30 - 9:10 *Hyperbolic-Concave Functions and the*
            Hardy-Littlewood Maximal Function
            Robert P. Kertz*, Georgia Institute of Technology
            and Uwe Rösler, University of Göttingen
9:10 - 9:50 *Generalized Majorization Orderings and Applications*
            Harry Joe, University of British Columbia
9:50 - 10:00 Discussion

10:00 -10:20 Coffee

(L) Matrix-Related Inequalities
    Chair: J. H. B. Kemperman, Rutgers University
10:20 - 11:00 *Correlation and Permanental Inequalities and*
            Matrix Majorization
            Yosef Rinott* and Michael Saks
            University of California at San Diego
11:00 - 11:40 *Matrix Extremes and Related Stochastic Bounds*
            Donald R. Jensen, Virginia Polytechnic Institute and
            State University
11:40 - 11:50 Discussion

(M) Dependence-Related Inequalities, I
    Chair: Philip J. Boland, University College Dublin
1:30 - 2:10 *Applications of Dependence to Burn-In*
            Henry W. Block, J. Mi, and Thomas H. Savits*,
            University of Pittsburgh
2:10 - 2:50 *Extreme Order Statistics for a Sequence of*
            Dependent Random Variables
            Joseph Glaz, University of Connecticut
2:50 - 3:00 Discussion

3:00 - 3:20 Coffee

(N) Applications of Inequalities, II
    Chair: Samuel Kotz, University of Maryland
3:20 - 4:00 *On Dynamic Forms of Probabilistic Causality*
        Elja Arjas, University of Oulu
4:00 - 4:40 *A Multivariate Stochastic Ordering by the Mixed Descending*
        Factorial Moments with Applications
        Claude Lefèvre, University of Brussels
        and Philippe Picard, University of Lyon
4:40 - 4:50 Discussion

7:00   Salmon Barbecue
           Terrace - McMahon Hall

Thursday, July 11

(O) Comparison of Experiments and Information Inequalities
    Chair: Erik N. Torgensen, University of Oslo
8:30 - 9:10 *A Group Action on Covariances with Applications to the*
        Comparison of Linear Normal Experiments
        Morris L. Eaton, University of Minnesota
9:10 - 9:50 *Comparison of Experiments Based on*
        Dependent Random Variables
        Moshe Shaked*, University of Arizona
        and Y. L. Tong, Georgia Institute of Technology
9:50 - 10:00 Discussion

10:00 -10:20 Coffee

(P) Dependence-Related Inequalities, II
    Chair: Thomas H. Savits, University of Pittsburgh
10:20 - 11:00 *Lower Bounds on Multivariate Distributions with*
        Preassigned Marginals
        Samuel Kotz*, University of Maryland
        and Joshua Seeger, BBN Communications
11:00 - 11:40 *Dependence of Stable Random Variables*
        Mei-Ling Lee*, Harvard University,
        Svetlozar T. Rachev, University of California at
        Santa Barbara
        and Gennady Samorodnitsky, Cornell University
11:40 - 11:50 Discussion

(Q) Inequalities in Reliability Theory, II

      Chair: Y. L. Tong, Georgia Institute of Technology

1:30 - 2:10 *A Study of the Role of Modules in the Failure of Systems*
          E. El-Neweihi, University of Illinois at Chicago Circle
          and J. Sethuraman*, Florida State University

2:10 - 2:50 *Stochastic Inequalities for a Redundancy Enhancement*
          to a Series or Parallel System
          Philip J. Boland, University College Dublin

2:50 - 3:00 Discussion

3:00 - 3:20 Coffee

(R) Applications of Inequalities, III

      Chair: Moshe Shaked, University of Arizona

3:20 - 4:00 *Some Statistical Applications of Stochastic Inequalities*
          Allan R. Sampson, University of Pittsburgh

4:00 - 4:40 *Orderings for Capacities and Their Applications*
          Marco Scarsini, University of Rome

4:40 - 4:50 Discussion