

Illinois Number Theory Conference
May 21–22, 2010
University of Illinois at Urbana-Champaign
Schedule of Talks

Friday, May 21, 245 Altgeld Hall

8:30–9:00 **REGISTRATION**

9:00–9:40 **Carl Pomerance** (Dartmouth College), *The Polya–Vinogradov inequality*

10:30–10:50 **Jonathan Sorenson** (Butler University), *A randomized sublinear time parallel GCD algorithm for the EREW PRAM*

11:00–11:20 **Joshua Holden** (Rose-Hulman Institute of Technology), *Fixed points and small cycles of the discrete logarithm using p -adic methods*

11:30–11:50 **Pace P. Nielsen** (Brigham Young University), *Factor chains, sieves, and odd perfect numbers*

12:00–12:20 **Thomas J. Engelsma** (Operational Techniques, Inc), *Counting prime patterns*

2:00–2:20 **Tsz Ho Chan** (University of Memphis), *Extending the Brun-Titchmarsh inequality to numbers with a certain number of prime factors*

2:30–2:50 **Craig Franze** (Central Michigan University), *Sifting Limits for Selberg's $\Lambda^2\Lambda^-$ Sieve*

3:00–3:20 **Robert Lemke Oliver** (University of Wisconsin), *Almost-primes represented by irreducible polynomials*

4:00–4:20 **Stephen Lester** (University of Rochester), *a -values of the Riemann zeta-function*

4:30–4:50 **Micah B. Milinovich** (University of Mississippi), *Gaps between consecutive non-trivial zeros of the Riemann zeta-function*

5:00–5:20 **Javier Echeverria** (CSIC, Madrid), *Stern Brocot's, Calkin's and Cantor's Trees*

6:00–8:30 **BANQUET, LEVIS CENTER**

Saturday, May 22, 245 Altgeld Hall

- 9:00–9:20 **Friedrich Littmann** (North Dakota State University), *Theta functions and band-limited approximations to the Gaussian*
- 9:30–9:50 **Jennifer Paulhus** (Kansas State University), *On the parity of k -th powers mod p*
- 10:30–10:50 **Zhu Cao** (University of Mississippi), *Rational matrix exact covering systems and a certain kind of product identities for theta functions*
- 11:00–11:20 **Matija Kazalicki** (University of Wisconsin), *2-adic properties of modular functions associated to the Fermat curves*
- 11:30–11:50 **Christelle Vincent** (University of Wisconsin), *Drinfeld modular forms modulo p*
- 12:00–12:20 **Jiangwei Xue** (Penn State University), *The Hodge group of certain simple factors of super-elliptic Jacobians*
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- 2:00–2:20 **Lenny Fukshansky** (Claremont McKenna College), *Orthogonal Siegel's lemma*
- 2:30–2:50 **David Hannasch** (UNLV), *Matrix Number Theory*
- 3:00–3:20 **Joseph Vandehey** (University of Illinois), *Squares in polynomial product sequences*
- 3:30–3:50 **Johann Thiel** (University of Illinois), *Conway's RATS*