IEEE Information Theory Society Newsletter

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President's Column

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The Future of Mars-Earth Communications

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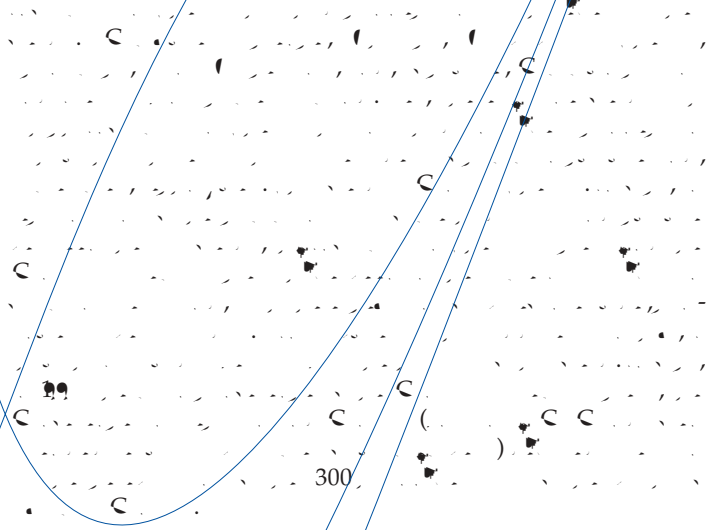

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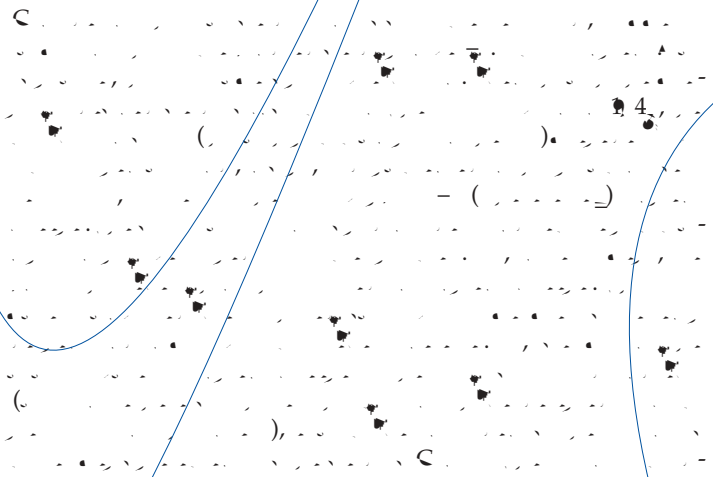

Call for Nominations: 2005 Information Theory Society Aaron D. Wyner Award

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Call for Nominations: 2005 IEEE Information Theory Society Paper Award

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Call for Nominations: 2005 Joint Information Theory/Communications Society Paper Award

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GOLOMB'S PUZZLE COLUMN™

A QUADRATIC SEQUENCE

[illegible]

[illegible] $s_n = 2n^2 + 2n + 1$ [illegible] $n \geq 0$. [illegible] $S = \{s_n\} = \{1,$ [illegible]$, 13,$ [illegible]$, 41,$ [illegible]$, 113,$ [illegible]$, 221,$ [illegible] $\ldots\}$. [illegible]

1. [illegible] p [illegible] S, [illegible] $p = 4m + 1$ [illegible] m.

2. [illegible] *every* [illegible] p [illegible] $4m + 1$ [illegible] S.

3. [illegible] p [illegible] $4m + 1$, [illegible] a [illegible] b, [illegible] p, [illegible] p [illegible] s_n [illegible] $n \equiv a($ [illegible] $p)$ [illegible] $n \equiv b($ [illegible] $p)$, [illegible] $a + b \equiv -1($ [illegible] $p)$ [illegible] $a \neq b$. ([illegible] $p =$ [illegible] $a = 1$ [illegible] $b = 3$.)

4. [illegible] $s_0 = 1^2$, $s_3 =$ [illegible]^2, [illegible] $s_{20} =$ [illegible]^2. [illegible] n [illegible] s_n [illegible].

[illegible] $c = \{c_n\} = \{1,$ [illegible]$, \ldots\}$ [illegible] ([illegible]) [illegible] S. [illegible] C, [illegible] $\lim_{n\to\infty}\left(\frac{c_{n+1}}{c_n}\right)$.

* [illegible] S [illegible]

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([illegible].)

New Books

B R [illegible]

Error Control Coding, 2nd Edition, [illegible], 2004, [illegible] $124, [illegible] 013042 [illegible]

Contents: [illegible]

Space-Time Codes and MIMO Systems, [illegible], 2004, [illegible] 3, [illegible]

Contents: [illegible] & [illegible]

[illegible] 02.11 [illegible]

Wireless Sensor Networks Architectures and Protocols, [illegible], 2004, [illegible]

[illegible]

Information Theory, Coding and Cryptography, [illegible], 2002, [illegible] 0-0 -123133-1 ([illegible]).

[illegible]

A Course in Error-Correcting Codes,

, 2004, 204 ., 0 0 €, 3-03 -001 .

Codes for Mass Data Storage Systems, 2nd Edition,

, 2004, 30 ., 1 €, 0- 424 -2 -2,
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Finite Automata,

. & , 2003, 320 .,
$ 1 4 -2 -

Handbook of Graph Theor ,

. , 2003,
11 ., $1 1 4 -0 0-2.

Computability Theory,

. . & , 2003, 424 ., $ 1 4 -23 .

Spanning Trees and Optimization Problems,

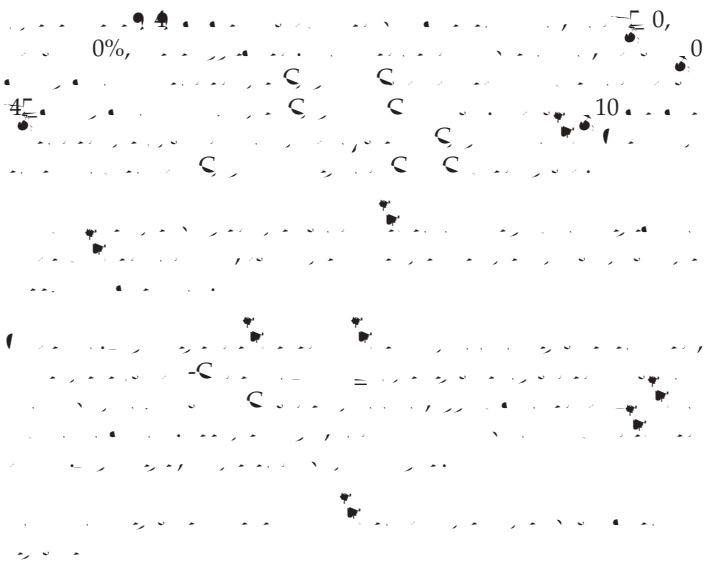
. & ,
2004, 200 ., $ 1 4 -43 -3.

Telecommunications Performance Engineering,

, 2004, 304 .,
0- 341-341-2.

Mobile and Wireless Communications: Key Technologies and Future Applications,

, 2004, 400 .,
0- 341-3 -4.



(*The Mathematics of Making a Mess*),
(*Information Theory in Cryptography*)
(*The Methods of Iterative Methods*),
(*On Fourier and Wavelets: Representation, Approximation and Compression*.)

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Xplore
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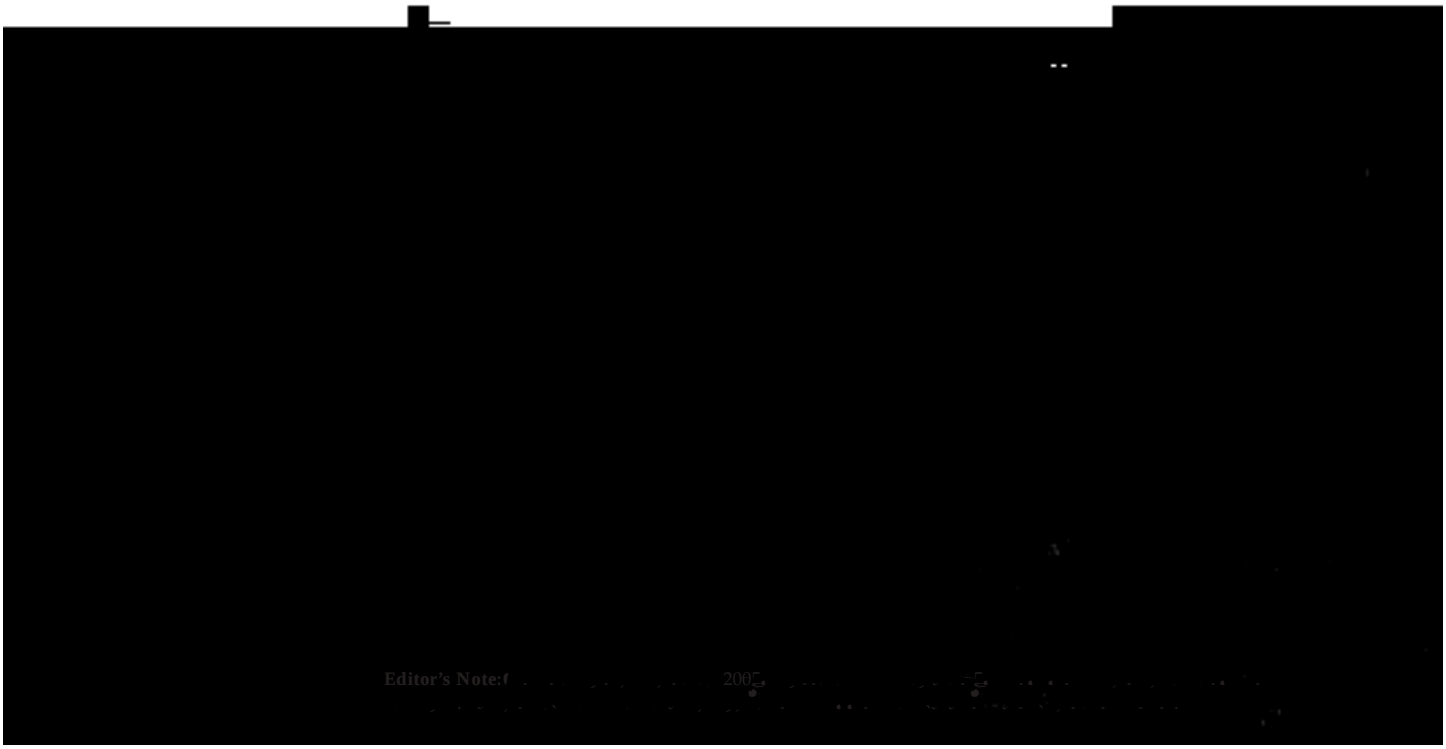
IEEE

Call for Papers
IEEE Information Theory Workshop
on

CALL FOR PAPERS

2005 IEEE International Symposium on Information Theory



Editor's Note: f 2005

Los Alamos

Los Alamos National Laboratory Workshop
on Applications of Statistical Physics to Coding Theory

Santa Fe, New Mexico
January 10–12, 2005

Call for Participation

The LANL Workshop on Applications of Statistical Physics to Coding Theory will be held in Santa Fe, New Mexico, and will be an excellent venue for outstanding speakers and contributed presentations. A workshop agenda can be found at

http://cnls.lanl.gov/

[redacted]

CALL FOR PAPERS AND FIRST ANNOUNCEMENT

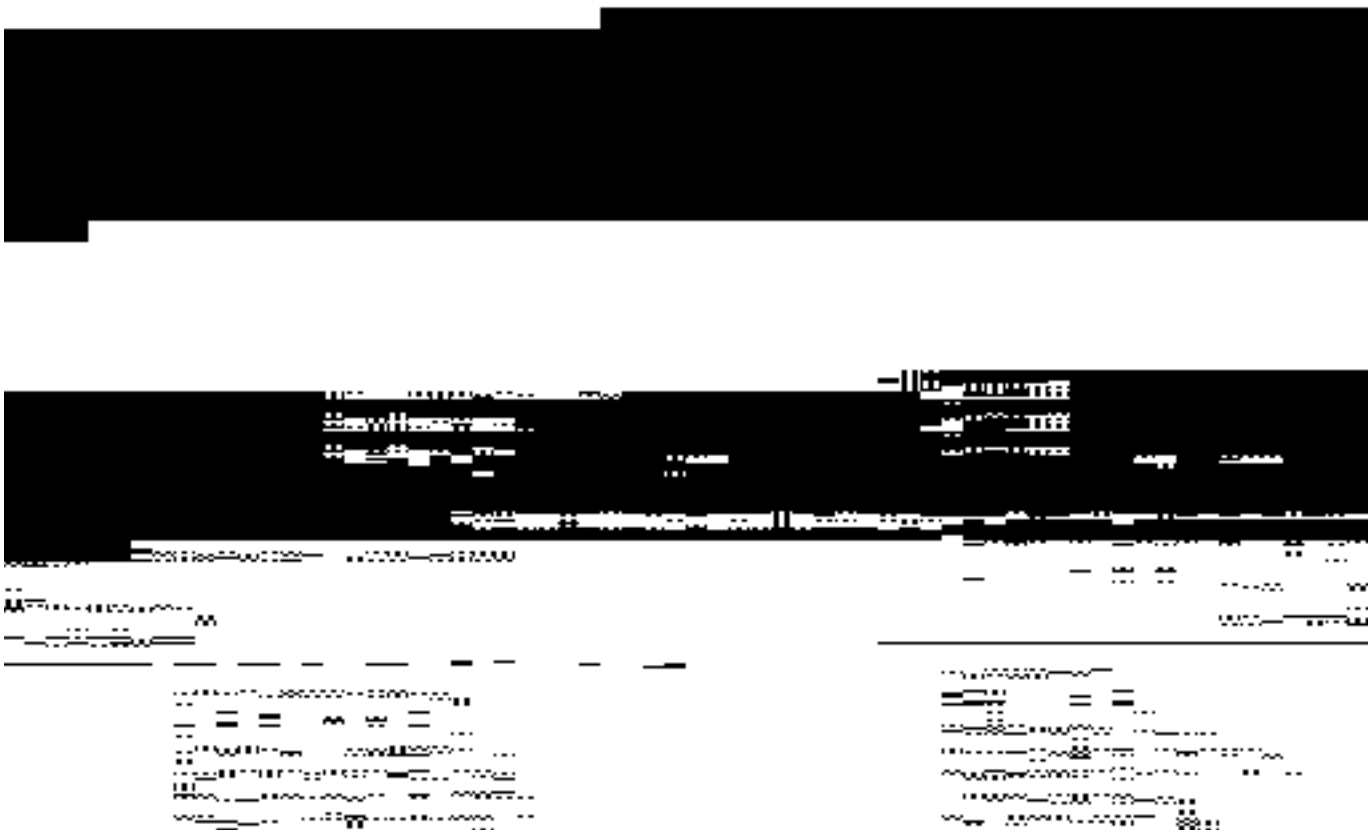
Fourth International Workshop on

[redacted]

Organizing Committee	Leo Storme (Gent), Henk van Tilborg (Eindhoven)
Local Organizer	Silvia Boumova (Sofia), Peter Boyvalenkov (Sofia), Emil Kolev (Sofia), Ivan Landjev (Sofia), Nikolay Manev, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences
Topics	• Optimal linear codes over finite fields and • Bounds for codes; • Spherical codes and designs; • Covering problems for linear and nonlinear codes; • Optimization problems for nonlinear codes; • Sets of points in finite geometries; • Combinatorial configurations and codes; • Optimality problems in cryptography; • Graph theory and codes; • Related topics.
Time	June 17 – 23, 2005
Loc	[redacted]

[redacted]	in hotel "Sunjata", full board, social events, workshop proceedings and materials]
	EURO 350 for students prior to May 10, EURO 500 for spouses
Deadlines	March 31, 2005: to inform the organiz April 15, 2005: Deadline for submissio
	May 1, 2005: Notification of acceptance (to be mailed out).
Languages	The official language of the Workshop will be English.
Proceedings	workshop. Authors are invited to submit an extended version (camera-ready p

CALL FOR PAPERS



DATE	CONFERENCE	LOCATION	CONTACT/INFORMATION	DUE DATE
10-12, 200	**LANL Workshop on Applications of Statistical Physics to Coding Theory**			
3- ,	**WiOpt 2005**			