

## PROGRAM

### Data Compression Conference (DCC 2009)

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**Snowbird, Utah  
March 16-18, 2009**

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#### SCHEDULE OVERVIEW:

##### **Sunday Evening, March 15:**

Registration and Reception

##### **Monday, March 16:**

Morning: Technical Sessions 1, 2, 3

Mid-Day: Invited Presentation

Afternoon: Technical Sessions 4, 5

##### **Tuesday, March 17:**

Morning: Technical Sessions 6, 7

Mid-Day: Technical Session 8

Afternoon: Poster Session and Reception

##### **Wednesday, March 18:**

Morning: Technical Sessions 9, 10, 11

## SUNDAY EVENING

Registration / Reception, 7:00-10:00pm (Golden Cliff Room)

## MONDAY MORNING

### SESSION 1

<b>8:00am:</b> On Minimum-Redundancy Fix-Free Codes .....	3
<i>Serap A. Savari</i> Texas A&M University	
<b>8:20am:</b> Low-Memory Adaptive Prefix Coding .....	13
<i>Travis Gagie, Marek Karpinski<sup>†</sup>, and Yakov Nekrich<sup>†</sup></i> University of Eastern Piedmont, <sup>†</sup> University of Bonn	
<b>8:40am:</b> High Performance Word-Codeword Mapping Algorithm on PPM .....	23
<i>Joaquin Adiego, Miguel A. Martinez-Prieto, and Pablo de la Fuente</i> Universidad de Valladolid	
<b>9:00am:</b> Guaranteed Synchronization of Huffman Codes with Known Position of Decoder .....	33
<i>Marek Tomasz Biskup and Wojciech Plandowski</i> University of Warsaw	
<b>9:20am:</b> pFPC: A Parallel Compressor for Floating-Point Data.....	43
<i>Martin Burtscher and Paruj Ratanaworabhan<sup>†</sup></i> University of Texas at Austin, <sup>†</sup> Cornell University	

**Break:** 9:40am - 10:00am

### SESSION 2

<b>10:00am:</b> Analysis of $K$ -Channel Multiple Description Quantization.....	53
<i>Guoqiang Zhang, Janusz Klejsa, and W. Bastiaan Kleijn</i> KTH - Royal Institute of Technology	
<b>10:20am:</b> Multi Level Multiple Descriptions .....	63
<i>Tal A. Beery and Ram Zamir</i> Tel Aviv University	
<b>10:40am:</b> Optimization of Correlated Source Coding for Event-Based Monitoring in Sensor Networks .....	73
<i>Jaspreet Singh, Ankur Saxena, Kenneth Rose, and Upamanyu Madhow</i> University of California, Santa Barbara	

**Break:** 11:00am - 11:20am

### SESSION 3

<b>11:20am:</b> The Posterior Matching Feedback Scheme for Joint Source-Channel Coding with Bandwidth Expansion .....	83
<i>Ofer Shayevitz and Meir Feder<sup>†</sup></i> University of California, San Diego, <sup>†</sup> Tel Aviv University	
<b>11:40am:</b> Joint Source-Channel Coding at the Application Layer .....	93
<i>O. Y. Bursalioglu, M. Fresia<sup>†</sup>, G. Caire, and H. V. Poor<sup>†</sup></i> University of Southern California, <sup>†</sup> Princeton University	
<b>12:00noon:</b> Analog Joint Source Channel Coding Using Space-Filling Curves and MMSE Decoding.....	103
<i>Yichuan Hu, Javier Garcia-Frias, and Meritxell Lamarca<sup>†</sup></i> University of Delaware, <sup>†</sup> Technical University of Catalonia (UPC)	

**Lunch Break:** 12:20pm - 2:30pm

**MONDAY MID-DAY INVITED PRESENTATION**

2:30pm - 3:30pm

**Sparse Signal Recovery, Compression, and Communication**

*Vivek Goyal, MIT*

Sparsity has become a pervasive theme in signal processing and has recently led to wholesale reexamination of data acquisition methods. Specifically, the central result in compressed sensing is that an approximately-sparse signal can be estimated well from a surprisingly small number of randomized measurements, through the use of a convex optimization procedure. This overturns conventional ideas about sample density and resolution. In addition to reviewing the development of compressed sensing, this talk will focus on the acquisition of (exactly) sparse signals and how this relates to compression and communication. Through recent results on recovering the sparsity pattern of a signal, we explain the performance of common convex optimization and greedy reconstruction techniques relative to both optimal and computationally-trivial methods. Applications and extensions of these ideas for random access communication are also discussed.

**Break:** 3:30 - 4:00pm

**MONDAY AFTERNOON**

**SESSION 4**

**4:00pm:** Analysis on Rate-Distortion Performance of Compressive Sensing  
for Binary Sparse Source ..... 113

*Feng Wu, Jingjing Fu<sup>†</sup>, Zhouchen Lin, and Bing Zeng<sup>†</sup>*

Microsoft Research Asia, <sup>†</sup>Hong Kong University of Science and Technology

**4:20pm:** Model-Guided Adaptive Recovery of Compressive Sensing ..... 123

*Xiaolin Wu, Xiangjun Zhang, and Jia Wang<sup>†</sup>*

McMaster University, <sup>†</sup>Shanghai JiaoTong University

**4:40pm:**  $l_1$  Compression of Image Sequences

Using the Structural Similarity Index Measure ..... 133

*Joachim Dahl, Jan Østergaard<sup>†</sup>, Tobias Lindstrøm Jensen<sup>†</sup>,  
and Søren Holdt Jensen<sup>†</sup>*

Anybody Technology A/S, <sup>†</sup>Aalborg University

**Break:** 5:00 - 5:20pm

**SESSION 5**

**5:20pm:** Tree Histogram Coding for Mobile Image Matching ..... 143

*David M. Chen, Sam S. Tsai, Vijay Chandrasekhar, Gabriel Takacs,  
Jatinder Singh<sup>†</sup>, and Bernd Girod*

Stanford University, <sup>†</sup>Deutsche Telekom Inc.

**5:40pm:** Compressed Kernel Perceptrons ..... 153

*Slobodan Vucetic, Vladimir Coric, and Zhuang Wang*  
Temple University

**6:00pm:** Overlapped Tiling for Fast Random Oblique Plane Access

of 3D Object Datasets ..... 163

*Zihong Fan, Antonio Ortega, and Cheng-hao Chien*  
University of Southern California, <sup>†</sup>California Institute of Technology

## TUESDAY MORNING

### SESSION 6

<b>8:00am:</b> Probing the Randomness of Proteins by Their Subsequence Composition .....	173
<i>Alberto Apostolico<sup>†,‡</sup> and Fabio Cunial<sup>‡</sup></i>	
<sup>†</sup> Università di Padova, <sup>‡</sup> Georgia Tech	
<b>8:20am:</b> Source Coding Scheme for Multiple Sequence Alignments.....	183
<i>Pavol Hanus, Janis Dingel, Georg Chalkidis, and Joachim Hagenauer</i>	
Technische Universität München, Germany	
<b>8:40am:</b> Linear Suffix Array Construction by Almost Pure Induced-Sorting .....	193
<i>Ge Nong, Sen Zhang<sup>†</sup>, and Wai Hong Chan<sup>‡</sup></i>	
Sun Yat-Sen University, <sup>†</sup> SUNY College at Oneonta, <sup>‡</sup> Hong Kong Baptist University	
<b>9:00am:</b> Compressed Transitive Delta Encoding .....	203
<i>Dana Shapira</i>	
Ashkelon Academic College	
<b>9:20am:</b> On Compression of Data Encrypted with Block Ciphers .....	213
<i>Demijan Klinc, Carmit Hazay<sup>†</sup>, Ashish Jagmohan<sup>‡</sup>, Hugo Krawczyk<sup>‡</sup>,     and Tal Rabin<sup>‡</sup></i>	
Georgia Institute of Technology, <sup>†</sup> Bar-Ilan University, <sup>‡</sup> IBM T.J. Watson Research Labs	

**Break:** 9:40am - 10:20am

### SESSION 7

<b>10:20am:</b> Compressive-Projection Principal Component Analysis and the First Eigenvector .....	223
<i>James E. Fowler</i>	
Mississippi State University	
<b>10:40am:</b> Clustered Reversible-KLT for Progressive Lossy-to-Lossless 3d Image Coding.....	233
<i>Ian Blanes and Joan Serra-Sagristà</i>	
Universitat Autònoma Barcelona	
<b>11:00am:</b> On Transform Coding with Dithered Quantizers .....	243
<i>Emrah Akyol and Kenneth Rose</i>	
University of California, Santa Barbara	
<b>11:20am:</b> Wavelet Image Two-Line Coder for Wireless Sensor Node with Extremely Little RAM.....	252
<i>Stephan Rein, Stephan Lehmann, and Clemens Gühmann</i>	
Technische Universität Berlin	
<b>11:40am:</b> An Adaptive Sub-Sampling Method for In-memory Compression of Scientific Data .....	262
<i>Didem Unat, Theodore Hromadka III, and Scott B. Baden</i>	
University of California, San Diego	

**Lunch Break:** 12:00pm - 2:00pm

## TUESDAY MID-DAY

### SESSION 8

<b>2:00pm:</b> Bits in Asymptotically Optimal Lossy Source Codes Are Asymptotically Bernoulli.....	272
<i>Robert M. Gray and Tamás Linder<sup>†</sup></i> Stanford University, <sup>†</sup> Queens University	
<b>2:20pm:</b> Communicating the Difference of Correlated Gaussian Sources over a MAC ....	282
<i>Rajiv Soundararajan and Sriram Vishwanath</i> University of Texas at Austin	
<b>2:40pm:</b> An Implementable Scheme for Universal Lossy Compression of Discrete Markov Sources.....	292
<i>Shirin Jalali<sup>†</sup>, Andrea Montanari<sup>†</sup>, and Tsachy Weissman<sup>†,‡</sup></i> <sup>†</sup> Stanford University, <sup>‡</sup> Technion	
<b>3:00pm:</b> Low Bit Rate Vector Quantization of Outlier Contaminated Data Based on Shells of Golay Codes.....	302
<i>Ioan Tabus and Adriana Vasilache<sup>†</sup></i> Tampere University of Technology, <sup>†</sup> Nokia Research Center	
<b>3:20pm:</b> Universal Refinable Trellis Coded Quantization.....	312
<i>Sebastian Steger and Thomas Richter<sup>†</sup></i> University of Technology, Berlin, <sup>†</sup> University of Stuttgart	

**Break:** 3:40pm - 4:00pm

## TUESDAY AFTERNOON POSTER SESSION AND RECEPTION

4:00-7:00pm

In the Golden Cliff Room

(Titles are listed at the end this program;  
abstracts of each presentation appear in the proceedings.)

## WEDNESDAY MORNING

### SESSION 9

<b>8:00am:</b> Implementation of an Incremental MDL-Based Two Part Compression Algorithm for Model Inference .....	322
<i>T. Stephen Markham, Scott C. Evans, Jeremy Impson<sup>†</sup>, and Eric Steinbrecher<sup>†</sup></i> General Electric Global Research, <sup>†</sup> Lockheed Martin	
<b>8:20am:</b> Lossy to Lossless Spatially Scalable Depth Map Coding with Cellular Automata.....	332
<i>Lorenzo Cappellari, Carlos Cruz-Reyes<sup>†</sup>, Giancarlo Calvagno,     and Jarkko Kari<sup>‡</sup></i> University of Padova, <sup>†</sup> Universitat Rovira I Virgili, <sup>‡</sup> University of Turku	
<b>8:40am:</b> Algorithmic Cross-Complexity and Relative Complexity.....	342
<i>Daniele Cerra<sup>†</sup> and Mihai Datcu<sup>†, ‡</sup></i> <sup>†</sup> Remote Sensing Technology Institute, <sup>‡</sup> Télécom Paris	

**Break:** 9:00am - 9:20am

### SESSION 10

<b>9:20am:</b> Compression-Induced Rendering Distortion Analysis for Texture/Depth Rate Allocation in 3D Video Compression .....	352
<i>Yanwei Liu<sup>†</sup>, Siwei Ma<sup>†</sup>, Qingming Huang, Debin Zhao<sup>‡</sup>, Wen Gao<sup>†</sup>,     and Nan Zhang<sup>†</sup></i> Chinese Academy of Sciences, <sup>†</sup> Peking University, <sup>‡</sup> Harbin Institute of Technology	
<b>9:40am:</b> Wireless Video Transmission: A Single Layer Distortion Optimal Approach .....	362
<i>Negar Nejati, Homayoun Yousefi'zadeh, and Hamid Jafarkhani</i> University of California, Irvine	
<b>10:00am:</b> H.264/MPEG-4 AVC Encoder Parameter Selection Algorithms for Complexity Distortion Tradeoff.....	372
<i>Rahul Vanam, Eve A. Riskin, and Richard E. Ladner</i> University of Washington	
<b>10:20am:</b> Low Complexity Spatio-Temporal Key Frame Encoding for Wyner-Ziv Video Coding .....	382
<i>Ghazaleh Esmaili and Pamela Cosman</i> University of California, San Diego	

**Break:** 10:40am - 11:00am

### SESSION 11

<b>11:00am:</b> Highly Accurate Distortion Estimation for JPEG2000 through PDF-Based Estimators.....	391
<i>Francesc Aulí-Llinàs, Michael W. Marcellin, and Joan Serra-Sagristà<sup>†</sup></i> University of Arizona, <sup>†</sup> Universitat Autònoma de Barcelona	
<b>11:20am:</b> A MS-SSIM Optimal JPEG 2000 Encoder .....	401
<i>Thomas Richter and Kil Joong Kim<sup>†</sup></i> University of Stuttgart, <sup>†</sup> Seoul National University	
<b>11:40am:</b> Lossy Hyperspectral Images Coding with Exogenous Quasi Optimal Transforms.....	411
<i>Michel Barret, Jean-Louis Gutzwiller, Isidore Paul Akam Bita<sup>†</sup>,     and Florio Dalla Vedova<sup>†</sup></i> SUPELEC, <sup>†</sup> LUXSPACE Sarl	
<b>12:00pm:</b> Out-of-Core Progressive Lossless Compression and Selective Decompression of Large Triangle Meshes .....	420
<i>Zhiyan Du, Pavel Jaromersky, Yi-Jen Chiang, and Nasir Memon</i> Polytechnic Institute of New York University	

# Poster Session

(listed alphabetically by first author)

DCT Domain Message Embedding in Spread-Spectrum Steganography System.....	433
<i>Neha Agrawal and Anubha Gupta</i>	
Netaji Subhas Institute of Technology	
A Zero Padding SVD Encoder to Compress Electrocardiogram .....	434
<i>Cristiano M. Agulhari, Ivanil S. Bonatti, and Pedro L. D. Peres</i>	
State University of Campinas - UNICAMP	
Nonuniform Dithered Quantization.....	435
<i>Emrah Akyol and Kenneth Rose</i>	
University of California, Santa Barbara	
LZB: Data Compression with Bounded References.....	436
<i>Mohammad Banikazemi</i>	
IBM Thomas J. Watson Research Center	
Optimized Source-Channel Coding of Video Signals in Packet Loss Environments.....	437
<i>Ufuk Celikcan and Ertem Tuncel</i>	
University of California, Riverside	
Design of Punctured LDPC Codes for Rate-Compatible Asymmetric	
Slepian-Wolf Coding.....	438
<i>Feng Cen</i>	
Tongji University	
The Block LZSS Compression Algorithm.....	439
<i>Wei-ling Chang, Xiao-chun Yun<sup>†</sup>, Bin-xing Fang, and Shu-peng Wang<sup>†</sup></i>	
Harbin Institute of Technology, <sup>†</sup> Chinese Academy of Science	
Slepian-Wolf Coding of Binary Finite Memory Source Using Burrows-	
Wheeler Transform.....	440
<i>Chao Chen, Xiangyang Ji, Qionghai Dai, and Xiaodong Liu</i>	
Tsinghua University	
Practical Parallel Algorithms for Dictionary Data Compression.....	441
<i>Luigi Cinque, Sergio De Agostino, and Luca Lombardi<sup>†</sup></i>	
Sapienza University, <sup>†</sup> University of Pavia	
Block Size Optimization in Deduplication Systems.....	442
<i>Cornel Constantinescu, Jan Pieper, and Tiancheng Li</i>	
IBM Almaden Research Center	
Modeling the Correlation Noise in Spatial Domain Distributed Video Coding.....	443
<i>Nikos Deligiannis, Adrian Munteanu, Tom Clerckx, Peter Schelkens,</i>	
<i>and Jan Cornelis</i>	
Vrije Universiteit Brussel	
On the Use of Suffix Arrays for Memory-Efficient Lempel-Ziv Data Compression.....	444
<i>Artur Ferreira<sup>†, #</sup>, Arlindo Oliveira<sup>†, □</sup>, and Mário Figueiredo<sup>†, #</sup></i>	
<sup>†</sup> Instituto Superior de Engenharia de Lisboa, <sup>‡</sup> Instituto Superior Técnico,	
<sup>□</sup> INESC-ID, <sup>#</sup> Instituto de Telecomunicações	
Fast Data Reduction via KDE Approximation .....	445
<i>Daniel Freedman and Pavel Kisilev</i>	
Hewlett-Packard Laboratories	

Decentralized Estimation Using Learning Vector Quantization .....	446
<i>Mihajlo Grbovic and Slobodan Vucetic</i>	
Temple University	
A Comparative Study of Lossless Compression Algorithms on Multi-spectral Imager Data.....	447
<i>M. Grossberg, I. Gladkova, S. Gottipati, M. Rabinowitz, P. Alabi,     T. George, and A. Pacheco</i>	
CCNY	
Adaptive Rate Allocation Algorithm for Transmission of Multiple Embedded Bit Streams over Time-Varying Noisy Channels .....	448
<i>Ahmad Hatam and Amir H. Banihashemi</i>	
Carleton University	
Suffix Tree Based VF-Coding for Compressed Pattern Matching .....	449
<i>Takuya Kida</i>	
Hokkaido University	
Fast Intra Prediction in the Transform Domain .....	450
<i>Chanyul Kim, Noel E. O'Connor, and Yunje Oh<sup>†</sup></i>	
Dublin City University, <sup>†</sup> Samsung Electronics, Co.	
A Fast Partial Distortion Elimination Algorithm Using Dithering Matching Pattern .....	451
<i>Jong-Nam Kim, Tae-Kyung Ryu, and Won-Hee Kim</i>	
Pukyong National University	
Lossless Image Compression by PPM-Based Prediction Coding .....	452
<i>Masato Kitakami and Kensuke Tai</i>	
Chiba University	
Perceptual Relevance Measure for Generic Shape Coding.....	453
<i>Zhongyuan Lai, Wenyu Liu, and Yuan Zhang</i>	
Huazhong University of Science and Technology	
Joint Network-Source Video Coding Based on Lagrangian Rate Allocation.....	454
<i>Xuguang Lan, Nanning Zheng, Jianru Xue, Ce Li, and Songlin Zhao</i>	
Xi'an Jiaotong University	
Improving Inverse Wavelet Transform by Compressive Sensing Decoding with Deconvolution .....	455
<i>Dong Liu, Xiaoyan Sun<sup>†</sup>, and Feng Wu<sup>†</sup></i>	
University of Science and Technology of China, <sup>†</sup> Microsoft Research Asia	
New Families and New Members of Integer Sequence Based Coding Methods .....	456
<i>Daniel Lowell and Dan E. Tamir</i>	
Texas State University	
Complex Wavelet Modulation Subbands for Speech Compression.....	457
<i>Jean-Marc Luneau, Jérôme Lebrun<sup>†</sup>, and Søren Holdt Jensen</i>	
Aalborg University, <sup>†</sup> CNRS - I3S	
Dual-Direction Prediction Vector Quantization for Lossless Compression of LASIS Data .....	458
<i>Jing Ma, Chengke Wu, Yunsong Li, and Keyan Wang</i>	
Xidian University	
On the Use of Word Alignments to Enhance Bitext Compression .....	459
<i>Miguel A. Martínez-Prieto, Joaquín Adiego, Felipe Sánchez-Martínez<sup>†</sup>,     Pablo de la Fuente, and Rafael C. Carrasco<sup>†</sup></i>	
Universidad de Valladolid, <sup>†</sup> Universitat d'Alacant	

A Binary Image Scalable Coder Based on Reversible Cellular Automata Transform and Arithmetic Coding.....	460
<i>Simone Milani, Carlos Cruz-Reyes<sup>†</sup>, Jarkko Kari<sup>‡</sup>, and Giancarlo Calvagno</i>	
University of Padova, <sup>†</sup> Universitat Rovira i Virgili, <sup>‡</sup> University of Turku	
Entropy Coding via Parametric Source Model with Applications in Fast and Efficient Compression of Image and Video Data .....	461
<i>Koohyar Minoo and Truong Nguyen<sup>†</sup></i>	
Motorola Inc., <sup>†</sup> University of California, San Diego	
Performing Vector Quantization Using Reduced Data Representation.....	462
<i>Erickson Miranda, Guoqiang Shan, and Vasileios Megalooikonomou</i>	
Temple University	
Set Partitioning in Hierarchical Frequency Bands (SPHFB).....	463
<i>Humberto Ochoa, Osslan Vergara, Vianey Cruz-Sánchez<sup>†</sup>, Gerardo Rosiles<sup>‡</sup>, and Javier Vega-Pineda<sup>□</sup></i>	
Universidad Autónoma de Ciudad Juárez, <sup>†</sup> Centro Nacional de Investigación y Desarrollo Tecnológico (cenidet), <sup>‡</sup> University of Texas at El Paso, <sup>□</sup> Instituto Tecnológico de Chihuahua	
Policy Allocation for Transmission of Embedded Bit Streams over Noisy Channels with Feedback.....	464
<i>Jinshi Qiu and Amir H. Banihashemi</i>	
Carleton University	
Fast 15x15 Transform for Image and Video Coding Applications.....	465
<i>Yuriy A. Reznik and Ravi K. Chivukula</i>	
Qualcomm Inc.	
Affine Modeling for the Complexity of Vector Quantizers .....	466
<i>Estevan P. Seraco and José Gabriel R. C. Gomes</i>	
Universidade Federal do Rio de Janeiro	
Binary Alpha-Plane Assisted Fast Motion Estimation of Video Objects in Wavelet Domain.....	467
<i>Chuan-Ming Song<sup>†</sup>, <sup>‡</sup>, Xiang-Hai Wang<sup>†</sup>, <sup>‡</sup>, Yanwen Guo<sup>†</sup>, and Fu-Yan Zhang<sup>†</sup></i>	
<sup>†</sup> Nanjing University, <sup>‡</sup> Liaoning Normal University	
How Can Intra Correlation Be Exploited Better <sup>□</sup> .....	468
<i>Feng Wu, Xiulian Peng<sup>†</sup>, Jizheng Xu, and Shipeng Li</i>	
Microsoft Research Asia, <sup>†</sup> University of Science and Technology of China	
Invertible Integer Lie Group Transforms .....	469
<i>Yusong Yan<sup>†</sup>, <sup>‡</sup> and Hongmei Zhu<sup>†</sup></i>	
<sup>†</sup> York University, <sup>‡</sup> Beijing Institute of Technology	
Iterative Decoding of Convolutionally Encoded Multiple Descriptions .....	470
<i>Kuang-Yi Yen, Chun-Feng Wu, and Wen-Whei Chang</i>	
National Chiao-Tung University	
Flexible Predictions Selection for Multi-view Video Coding .....	471
<i>Fan Zhao, Guizhong Liu, Feifei Ren, and Na Zhang</i>	
Xi'an Jiaotong University	
Low-Complexity Joint Source/Channel Turbo Decoding of Arithmetic Codes with Image Transmission Application.....	472
<i>Amin Zribi<sup>†</sup>, <sup>‡</sup>, Sonia Zaibi<sup>†</sup>, Ramesh Pyndiah<sup>†</sup>, and Ammar Bouallègue<sup>†</sup></i>	
<sup>†</sup> Syscom Laboratory, ENIT, <sup>‡</sup> Telecom Bretagne	
Author Index .....	473