

CORRIGENDA**BULLETIN OF THE AMERICAN PHYSICAL SOCIETY, VOL. 50, No. 1****MARCH MEETING 2005**

This Corrigenda is designed to complement *The Bulletin of the American Physical Society*. This list incorporates changes, additions and withdrawals that were received after the *Bulletin* was printed. The most up-to-date changes will be displayed on a white board in the meeting hall. Please inquire at registration as to the location of this board.

ABSTRACT WITHDRAWALS

<u>SESSION</u>	<u>TITLE</u>	<u>FIRST AUTHOR</u>
A13.07	Momentum-Structure of Remnant Mott-gap in Prototype Doped Cuprates	Yinwan Li
B44.05	A New Approach for Extracting the Pair Distribution Function of Liquids from X-Ray Scattering Experiments	David Vaknin
D12.04	Macroscopic resonant tunneling in extremely asymmetric superconducting qubits.	Philip R. Johnson
D23.10	Effect of Disorder Strength on Optimal Paths in Complex Networks	Sameet Sreenivasan
D37.13	Dynamics of self-assembling rigid rods	Johan Dubbeldam
H10.07	Spin-Fermion Models for Manganites and Diluted Magnetic Semiconductors: A Dynamical Mean Field Study	Florentin Popescu
H22.11	Low Temperature Intrinsic Paramagnetism in B-DNA	Sawako Nakamae
H24.13	Statistical Analysis of Surface Roughness and Dynamic Friction Profiles During Metalforming	Steven Mates
H26.06	High frequency properties of a CNT-based nanorelay	Jari Kinaret
H38.08	Electron-phonon interaction close to a Mott transition	Giorgio Sangiovanni
J37.03	Dynamic PIV measurement on the wake of thin plate	Koji Okamoto
K1.67	Quantum Monte Carlo-simulation for the conductance of one-dimensional quantum-spin systems	Kim Louis
K1.141	Stereocomplex Formation in Racemic Chiral Polylactide Block Copolymers	Lu Sun
L12.03	Penetration Depth and Isotope Effect in Highly Overdoped YBCO	Andrei Baikalov
L15.09	The influence of growth temperature on the nitrogen incorporation into MBE-grown GaInNAs-on-GaAs epilayers	Emil-Mihai Pavelescu
N1.05	Superconducting Flux Qubits	Kees Harmans

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N9.08	Evidence for a strong coupling transition in $\text{Y}_2\text{Ru}_2\text{O}_7$	Joost van Duijn
N10.11	Auger recombination of excitons in semimagnetic quantum dot structure in a magnetic field	Alexander Chernenko
N32.01	Chiral symmetry breaking in QED3 in presence of irrelevant interactions: a renormalization group study	Kamra Kaveh
N37.12	Electroosmosis through a Bottleneck: Formation of Eddies and Theory for Arbitrary Debye Lengths	Stella Park
N40.10	Fractal-Mound Growth of Pentacene Thin Films: A Novel Morphology	Serkan Zorba
P37.06	Effect of Korteweg Stress of Miscible Two Liquid Flow on Micro Fluidic Devices	Yasuhiko Sugii
R1.89	Calculation of Phonon Dispersion and Thermal Conductivity in Carbon Nanotubes	Mayank Varshney
R1.137	Magnetization study on Ferro-Antiferromagnetic Superlattices based on Manganites of the type $\text{La}_x\text{Ca}_{1-x}\text{MnO}_3$	Gloria Campillo
R1.189	Otoacoustic emissions from the cochlea as a convenient model for investigation of convectively unstable nonlinear systems	David Mills
S12.14	Chiral symmetry breaking in QED3 in presence of irrelevant interactions: a renormalization group study	Kamra Kaveh
S21.05	MSP dynamics and retraction in nematode sperm	Charles Wolgemuth
S21.06	Untwisting the mystery of supercoiling: Mbl configuration in growing bacterial filaments	Sulav Mukherjee
S32.06	Exponentially localized quasi-free-particle generalized Wannier functions	Bradley Forman
S41.05	Pressure induced quantum phase transitions in Ca_2RuO_4	Patricia Lebre Alireza
U13.01	Measuring equipment for thermophysical properties of droplet electromagnetically-levitated under axial static magnetic field	Fumitomo Onishi
U13.12	<u>Towards SiC surface functionalization: an ab initio study</u>	Alessandra Catellani
U29.11	Aggregation can enhance the O/PLED efficiency	Zhigang Shuai
U43.03	Phase separation and Jahn-Teller effect in spinels	Sunmog Yeo
V22.07	Noise-enhanced periodicity in hair cells and primary afferent neurons	Alexander Neiman
V26.05	Si/Si:Er Multi-Nanolayers for Silicon Photonics	Quang Vinh Nguyen

V34.01	Time-resolved electron diffraction measurement of laser-induced solid-solid transition of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$	Hyuk Park
W4.05	Lithium and proton conducting membranes: Two sets of challenges for the polymer physicist.	Michel Armand
W22.07	A Monte Carlo study of some non-equilibrium driven models and their contribution to the understanding of molecular motors	Irina Mazilu
W38.11	Combined Magnetic Phase Diagram of Cation- and Anion-doped Lanthanum Cuprates.	Zheng Wu
X10.04	Stochastic Variational description of interacting few-electron quantum dots with Rashba spin-orbit interaction	Kalman Varga
X10.05	Shallow donor electron spins as qubits in silicon: detection and manipulation	Marco Faniciulli
X12.05	Impact of the reduction process on the long-range antiferromagnetism in $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$	Pierre Richard
X17.09	Si-based single-electron devices with tunable barriers	Neil Zimmerman
X27.05	Construction of a Atomic Force Microscope for low temperature measurements of nanostructures	Matthew Prior
Y30.02	A Comparison of Techniques for Analyzing Dielectric Relaxation Spectra Containing DC Conductivity	Chad Snyder
Y31.13	Scaling laws for polymer chains using mesoscopic simulations	Vasileios Symeonidis
Y42.14	Leads as Self-Energies in Nonequilibrium Spin Transport	Michael Johnson

SPEAKER CHANGES

<u>SESSION</u>	<u>TITLE</u>	<u>NEW SPEAKER</u>	<u>ORIGINAL SPEAKER</u>
A5.04	INDUSTRIALIZATION OF OLEDs FOR LIGHTING APPLICATIONS AND DISPLAYS	REINDER COELHOORN, PHILIPS RESEARCH	KLEMENS BRUNNER
B5.01	EINSTEIN AND MILLIKAN	CHARLOTTE ERWIN, CALTECH	JUDITH GOODSTEIN
H41.09	Mu SR Study of $\text{LiHo}_x\text{Y}_{1-x}\text{F}$	C.R. WIEBE, BROCK UNIVERSITY	J. Rodriguez
N5.03	HOMELAND SECURITY, MEDICAL, PHARMACEUTICAL AND NON-DESTRUCTIVE TESTING APPLICATIONS OF TERAHERTZ RADIATION	DR. COLIN BAKER, TERAVIEW LTD.	MIKE KEMP

Changes as of March 16, 2005

N7.02	EINSTEIN, BOHR & BORN: SCIENTIFIC FRIENDSHIPS AND THEIR VAGARIES	NANCY GREENSPAN, BETHESDA, MARYLAND	DIANA BUCHWALD
W35.01	MOLECULAR ELECTRONICS IV	WENJIE LIANG, HARVARD UNIVERSITY	HONGKUN PARK

SESSION CHAIR CHANGES

<u>SESSION</u>	<u>NEW CHAIR</u>
A20 MULTILAYERS, THIN FILMS, AND INTERFACES	DAVID PAPPAS, NIST
B5 EINSTEIN AND FRIENDS I	VIRGINIA TRIMBLE, UC-IRVINE
D5 THE GRAND CHALLENGE OF HYDROGEN STORAGE	SUNITA SATYAPAL, U.S. DEPT. OF ENERGY FREDERICK PINKERTON, GM R&D CENTER
D41 COOPERATIVE PHENOMENA: MAGNETIC PROPERTIES AND SPIN DYNAMICS	MAXIM TSOI, UNIVERSITY OF TEXAS AT AUSTIN
N13 DEVICES AND APPLICATIONS I	MATT KIM, QUANTTERA
S6 SOLID STATE QUBITS, RESONATORS, AND QUANTUM OPTICS	DR. EHUD ALTMAN, HARVARD UNIVERSITY
S14 HYDROGEN STORAGE II: MEASUREMENTS	GREGORY MEISNER, GM R&D CENTER
S21 CELLULAR BIOMECHANICS	ZUZANNA SIWY, UNIVERSITY OF FLORIDA
S32 ELECTRONIC STRUCTURE	DR. DAVID VANDERBILT, RUTGERS UNIVERSITY
U14 HYDROGEN STORAGE III: MODELING	JAN HERBST, GM R&D CENTER
X35 ENERGY LANDSCAPES OF GASES, CLUSTERS, MATERIALS AND BIOMOLECULES	I.G. SHUTTLEWORTH, RUTGERS UNIVERSITY

NAME CORRECTIONS

<u>SESSION</u>	<u>TITLE</u>	<u>AUTHOR NAME</u>	<u>CORRECTION</u>
H9.08	EFFECTS OF MAGNETIC IMPURITIES I QUASI-ONE-DIMENSIONAL MAGNETS	MUNEHISA MATSUMOTO	(ADDITIONAL AUTHOR) HAJIME TAKAYAMA, UNIV. OF TOKYO
S37.014	RELAXATION IN A GLASSY BINARY MIXTURE: A COMPARISON OF A BROWNIAN DYNAMICS SIMULATION AND THE MODE-COUPPLING THEORY		ELIJAH FLENNER, GRZEGORZ SZAMEL, COLORADO STATE UNIV.

Changes as of March 16, 2005

V44.07	EFFECTS OF INDUCED STRAIN ON GaAs NANOMECHANICAL RESONATOR	Y.N. PARK	Y.D. PARK
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TITLE CORRECTIONS

<u>SESSION</u>	<u>TITLE</u>	<u>AUTHOR NAME</u>	<u>CORRECTED TITLE</u>
N43.08	STRAIN-INDUCED METAL- INSULATOR PHASE COEXISTENCE	K.H. AHN	STRAIN-INDUCED METAL-INSULATOR PHASE COEXISTENCE IN PEROVSKITE MANGANITES
P34.01	PATHWAYS TO FORMING GLASS: BUBBLES IN SPACE-TIME	DAVID CHANDLER	LANGMUIR PRIZE TALK: PATHWAYS TO FORMING GLASS: BUBBLES IN SPACE-TIME

SESSION ASSIGNMENT CHANGES

<u>ORIGINAL PLACEMENT</u>	<u>NEW PLACEMENT</u>	<u>TITLE</u>	<u>FIRST AUTHOR</u>
A16.04	R1.249	OPTICAL RESPONSE OF STRUCTURED NOBLE-METAL NANOPARTICLE AGGREGATES	JUN JUN XIAO
Y17.01	D33.11	PHONON DECOHERENCE OF A DOUBLE QUANTUM DOT CHARGE QUBIT	EDUARDO MUCCIOLO
Y25.02	S16.13	MODIFICATION OF ELECTRONIC PROPERTIES OF NANOGRAHITE DUE TO CHEMICAL TREATMENTS	DMITRY DIKIN

ABSTRACT ADDITIONS

<u>ABSTRACT</u>	<u>SESSION, DATE & TIME</u>
<p>“DIRECT MEASUREMENT OF TORQUE ON SINGLE DNA MOLECULES: AN OLD PROBLEM WITH A NEW TWIST”, CARLOS BUSTAMANTE, DEPT. OF PHYSICS AND MOLECULAR & CELL BIOLOGY, HOWARD HUGHES MEDICAL INSTITUTE, UNIVERSITY OF CALIFORNIA, BERKELEY</p> <p>Knowing the elastic properties of DNA is essential to understanding DNA:protein interactions and the structural dynamics of cellular processes such as replication, transcription, and chromosome condensation. As a first step towards studying transcription in topologically constrained molecules, we have developed a single molecule assay to determine the torsional mechanics of DNA. We have used a technique based on optical trapping and video microscopy to measure torque as a function of twist for stretched DNA tethers. Torsional strain in over- or underwound molecules was used to power the rotation of submicron beads that served as calibrated viscous loads. We tested the linearity of DNA’s twist elasticity, directly measured the torsional modulus (finding a value 40% higher than widely used), characterized torque-induced structural transitions, and established a framework for future assays of torque and twist generation by DNA-dependent enzymes. In addition, our observations of continuous DNA-powered rotation have implications for the construction of nanomechanical devices: we have demonstrated that cooperative structural transitions in DNA can be exploited to construct a constant-torque windup motor and a force-torque converter.</p>	<p>SESSION G1.01: MONDAY, MARCH 21, 8:00PM</p>
<p>“METHODS OF PHOTONIC CRYSTAL FABRICATION”, STEVE NIXON, CALIFORNIA STATE UNIVERSITY, SACRAMENTO</p> <p>Photonic crystals are periodic electromagnetic materials that contain photonic band gaps. Photonic band gaps are ranges of frequencies in which light cannot propagate through the medium, creating a sort of optical insulator. During this past year, I have worked on building photonic crystals using both existing and experimental methods of fabrication. My talk will discuss our most common method of construction as well as some of our results.</p> <p>References: E. Yablonovich, Phys. Rev. Lett., 58, 20, 1987 F. Meseguer, A. Blanco, H. Miguez, F. Garcia-Santamaria, M. Ibañeta, C.Lopez, Colloids and Surfaces A, 202 281-290 (2002) S.H. Park, D. Qin, Y. Xia, Advanced Materials, 10, 13, 1998 C. Schuller, F. Kloppe, J.P. Reithmaier, M. Kamp, A. Forchel, Appl. Phys. Lett., 82, 17, 2003 J.D. Joannopoulos, R.D. Meade, J.N. Winn, <i>Photonic Crystals: Molding the Flow of Light</i>. Princeton University Press, 1995</p>	<p>SESSION A39.13: MONDAY, MARCH 21, 10:48AM</p>

PRESENTATION TIME CHANGES

SESSION X15: THERMOELECTRICS

FRIDAY, MARCH 25, 2005

LACC- 405

- X15.01 8:00 - 8:12AM Transport properties of germanium-filled skutterudites, Jihui Yang**
X15.02 8:12 - 8:24AM Novel High Efficient Cooling Devise Based on a Combination of Physical Processes, Alex Mischenko
X15.03 8:24 - 8:36AM Angle-resolved photoemission spectroscopy study of n-type Bi₂Te₃, Han-Jin Noh
X15.04 8:36 - 8:48AM Atomistic modeling of thermoelectric properties of Bi₂Te₃ and Sb₂Te₃, Seungwon Lee
X15.05 8:48 - 9:00AM Atomistic simulation of nanostructure effects on thermoelectric properties in Si/Ge nanowires, Haibin Su
X15.06 9:00 - 9:12AM Correlating thermoelectric efficiency with nanowire diameter for electrodeposited Bismuth Telluride nanowire arrays, Erik Menke

SESSION P3: PHYSICS AND SUSTAINABLE DEVELOPMENT

WEDNESDAY, MARCH 23, 2005

LACC- 515B

- P1.001 11:15-11:51AM Doing Physics with Third World Collaborators, Steven Manson**
P1.002 11:51-12:27PM Energy and the Environment in the 21st Century
P1.003 12:27-1:03PM Exploring Ways to Promote and Sustain Physics Education in the Non-Industrial Countries, Priscilla Laws
P1.004 1:03-1:39PM Physics and Health in the Developing Countries, Perry Sprawls
P1.005 1:39-2:15PM Panel Discussion

SESSION M44: GIMS BUSINESS MEETING

TUESDAY, MARCH 22, 2005

LACC- 518

Revised Time: 6:10pm - 7:00pm