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Authors and titles for Jun 2011, skipping first 650

[651] arXiv:1106.5390 (cross-list from cond-mat.stat-mech) [**pdf**, **ps**, **other**]

Stochastic dynamics of an electron in a Penning trap: phase flips correlate with amplitude collapses and revivals

S. Brouard, J. Plata
Comments: 15 pages, 6 figures
Journal-ref: Phys. Rev. A 83, 063408 (2011)
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Atomic Physics (physics.atom-ph)

[652] arXiv:1106.5525 (cross-list from cond-mat.mtrl-sci) [**pdf**]

Magnetically-triggered Nanocomposite Membranes: a Versatile Platform for Triggered Drug Release

Todd Hoare, Brian P. Timko, Jesus Santamaria, Gerardo F. Goya, Silvia Irusta, Debora Lin, Samantha Lau, Robert Langer, Daniel S. Kohane
Comments: 13 Pages + Supplementary material
Journal-ref: Nano Lett., 2011, 11 (3), pp 1395-1400
Subjects: **Materials Science (cond-mat.mtrl-sci)**; Biological Physics (physics.bio-ph); Subcellular Processes (q-bio.SC)

[653] arXiv:1106.5526 (cross-list from cond-mat.supr-con) [**pdf**, **other**]

High-Temperature Superconductivity in Atomic Metallic Hydrogen

Jeffrey M. McMahon, David M. Ceperley
Comments: 19 pages; 9 figures; 4 tables
Subjects: **Superconductivity (cond-mat.supr-con)**; Computational Physics (physics.comp-ph)

[654] arXiv:1106.5557 (cross-list from cond-mat.stat-mech) [**pdf**, **ps**, **other**]

Quantum chaos: an introduction via chains of interacting spins-1/2

Aviva Gubin, Lea F. Santos
Comments: 7 pages, 3 figures
Journal-ref: Am. J. Phys. 80, 246 (2012)
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Quantum Physics (quant-ph)

[655] arXiv:1106.5594 (cross-list from cs.SI) [**pdf**, **other**]

The Swiss Board Directors Network in 2009

Fabio Daolio, Marco Tomassini, Konstantin Bitkov
Comments: Submitted to The European Physical Journal B
Subjects: **Social and Information Networks (cs.SI)**; Physics and Society (physics.soc-ph)

[656] arXiv:1106.5609 (cross-list from nlin.PS) [**pdf**, **ps**, **other**]

A refined empirical stability criterion for nonlinear Schroedinger solitons under spatiotemporal forcing

Franz G. Mertens, Niurka R. Quintero, I. V. Barashenkov, A. R. Bishop
Comments: 29 pages

Subjects: **Pattern Formation and Solitons (nlin.PS)**; Mathematical Physics (math-ph); Optics (physics.optics)

[657] **arXiv:1106.5673** (cross-list from hep-lat) [**pdf**, **ps**, **other**]

QCD simulations with staggered fermions on GPUs

Claudio Bonati, Guido Cossu, Massimo D'Elia, Pietro Incardona
Comments: 22 pages, 14 eps figures, final version to be published in Computer Physics Communications
Journal-ref: Computer Physics Communications 183 (2012) 853-863
Subjects: **High Energy Physics - Lattice (hep-lat)**; Computational Physics (physics.comp-ph)

[658] **arXiv:1106.5713** (cross-list from quant-ph) [**pdf**, **ps**, **other**]

Two-particle bosonic-fermionic quantum walk via 3D integrated photonics

Linda Sansoni, Fabio Sciarrino, Giuseppe Vallone, Paolo Mataloni, Andrea Crespi, Roberta Ramponi, Roberto Osellame
Comments: 4 pages, 5 figures + supplementary information
Journal-ref: Phys. Rev. Lett. 108, 010502 (2012)
Subjects: **Quantum Physics (quant-ph)**; Statistical Mechanics (cond-mat.stat-mech); Optics (physics.optics)

[659] **arXiv:1106.5717** (cross-list from quant-ph) [**pdf**, **ps**, **other**]

Finite-temperature nonlinear dynamics in cavity QED: A Thermofield Dynamics Approach

D.U.Matrasulov, T.Ruzmetov, D.M.Otajanov, P.K.Khabibullaev, A.A.Saidov, F.C.Khanna
Journal-ref: Physics Letters A 373 (2009) 238-242
Subjects: **Quantum Physics (quant-ph)**; Mesoscale and Nanoscale Physics (cond-mat.mes-hall); Chaotic Dynamics (nlin.CD); Atomic Physics (physics.atom-ph)

[660] **arXiv:1106.5725** (cross-list from hep-lat) [**pdf**, **other**]

Lattice Monte Carlo calculations for unitary fermions in a harmonic trap

Michael G. Endres, David B. Kaplan, Jong-Wan Lee, Amy N. Nicholson
Comments: 48 pages, 19 figures, published version, some text revised, typos corrected, title changed in journal; previously "Unitary fermions on the I: in a harmonic trap"
Journal-ref: Phys. Rev. A 84, 043644 (2011)
Subjects: **High Energy Physics - Lattice (hep-lat)**; Quantum Gases (cond-mat.quant-gas); Nuclear Theory (nucl-th); Atomic Physics (physics.ator

[661] **arXiv:1106.5793** (cross-list from cond-mat.stat-mech) [**pdf**, **ps**, **other**]

A Replica Inference Approach to Unsupervised Multi-Scale Image Segmentation

Dandan Hu, Peter Ronhovde, Zohar Nussinov
Comments: 26 pages, 22 figures
Journal-ref: Phys. Rev. E 85, 016101 (2012)
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Computer Vision and Pattern Recognition (cs.CV); Physics and Society (physics.soc-ph)

[662] **arXiv:1106.5924** (cross-list from cond-mat.soft) [**pdf**]

Change of caged dynamics at Tg in hydrated proteins found after suppressing the methyl-group rotation contribution

K. L. Ngai, S. Capaccioli, A. Paciaroni
Comments: 23 pages, 7 figures
Subjects: **Soft Condensed Matter (cond-mat.soft)**; Biological Physics (physics.bio-ph)

[663] **arXiv:1106.5938** (cross-list from cond-mat.stat-mech) [**pdf**, **other**]

Susceptibility divergence, phase transition and multistability of a highly turbulent closed flow

P.-P. Cortet, E. Herbert, A. Chiffaudel, F. Daviaud, B. Dubrulle, V. Padilla
Comments: to appear in Journal of Statistical Mechanics
Journal-ref: Journal of Statistical Mechanics P07012 (2011)
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Fluid Dynamics (physics.flu-dyn)

[664] **arXiv:1106.5987** (cross-list from math-ph) [**pdf**, **ps**, **other**]

Closed form solution for a double quantum well using Gröbner basis

A. Acus, A. Dargys
Comments: 4 figures, Mathematica full calculation notebook
Subjects: **Mathematical Physics (math-ph)**; Computational Physics (physics.comp-ph)

[665] **arXiv:1106.5994** (cross-list from quant-ph) [**pdf**, **other**]

An explanation of interference effects in the double slit experiment: Classical trajectories plus ballistic diffusion caused by zero-point fluctuations

Gerhard Groessing, Siegfried Fussy, Johannes Mesa Pascasio, Herbert Schwabl
Comments: 26 pages, 6 figures; accepted version to be published in Annals of Physics (2012)
Journal-ref: Ann. Phys. 327, 2 (2012), 421-437
Subjects: **Quantum Physics (quant-ph)**; Classical Physics (physics.class-ph)

[666] **arXiv:1106.6118** (cross-list from cond-mat.soft) [**pdf**, **ps**, **other**]

Electric field inside a "Rossky cavity" in uniformly polarized water

Daniel R. Martin, Allan D. Friesen, Dmitry V. Matyushov
Comments: 9 pages, 8 figures
Subjects: **Soft Condensed Matter (cond-mat.soft)**; Biological Physics (physics.bio-ph); Chemical Physics (physics.chem-ph)

[667] **arXiv:1106.6178** (cross-list from astro-ph.EP) [**pdf**]

Lunar Eclipse of June, 15, 2011: Three-color umbra surface photometry

Oleg S. Ugolnikov, Igor A. Maslov, Stanislav A. Korotkiy
Comments: 4 pages, 2 figures
Subjects: **Earth and Planetary Astrophysics (astro-ph.EP)**; Atmospheric and Oceanic Physics (physics.ao-ph)

[668] **arXiv:1106.6200** (cross-list from cond-mat.stat-mech) [**pdf**, **ps**, **other**]

Scaling Relations for Watersheds

E. Fehr, D. Kadau, N. A. M. Araújo, J. S. Andrade Jr., H. J. Herrmann
Journal-ref: Physical Review E 84, 036116 (2011)
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Computational Physics (physics.comp-ph); Geophysics (physics.geo-ph)

[669] **arXiv:1106.6217** (cross-list from cs.DC) [**pdf**]

Computing trends using graphic processor in high energy physics

Mihai Niculescu, Sorin-Ion Zgura
Subjects: **Distributed, Parallel, and Cluster Computing (cs.DC)**; High Energy Physics - Experiment (hep-ex); Computational Physics (physics.comp-ph)

[670] **arXiv:1106.6233** (cross-list from math.NA) [**pdf**, **other**]

On diffuse interface modeling and simulation of surfactants in two-phase fluid flow

Stefan Engblom, Minh Do-Quang, Gustav Amberg, Anna-Karin Tornberg
Subjects: **Numerical Analysis (math.NA)**; Analysis of PDEs (math.AP); Fluid Dynamics (physics.flu-dyn)

[671] **arXiv:1106.6236** (cross-list from nlin.CD) [**pdf**, **ps**, **other**]

Classical dynamics and particle transport in kicked billiards

D.U. Matrasulov, U.R. Salomov, G.M. Milibaeva, N.E. Iskandarov
Journal-ref: Physica D 240, 470 (2011)
Subjects: **Chaotic Dynamics (nlin.CD)**; Mesoscale and Nanoscale Physics (cond-mat.mes-hall); Exactly Solvable and Integrable Systems (nlin.SI); Atomic Physics (physics.atom-ph); Classical Physics (physics.class-ph)

[672] **arXiv:1106.6244** (cross-list from cond-mat.dis-nn) [**pdf**, **other**]

Critical behavior of the Random-Field Ising Magnet with long range correlated disorder

Björn Ahrens, Alexander K. Hartmann
Comments: 9 pages, 13 figures
Subjects: **Disordered Systems and Neural Networks (cond-mat.dis-nn)**; Computational Physics (physics.comp-ph)

[673] **arXiv:1106.6266** (cross-list from cond-mat.supr-con) [**pdf**]

Millimeter-wave study of London penetration depth temperature dependen in Ba(Fe0.926Co0.074)2As2 single crystal

A.A. Barannik, N.T. Cherpak, N. Ni, M.A. Tanatar, S.A. Vitusevich, V.N. Skresanov, P.C. Canfield, R. Prozorov, V.V. Glamazo K.I. Torokhtii
Comments: 6 pages, 2 figures, to be published in Low Temperature Physics,vol.37, August 2011
Subjects: **Superconductivity (cond-mat.supr-con)**; Instrumentation and Detectors (physics.ins-det)

[674] **arXiv:1106.6295** (cross-list from cond-mat.quant-gas) [**pdf**, **other**]

Condensed Fraction of an Atomic Bose Gas Induced by Critical Correlation

Robert P. Smith, Naaman Tammuz, Robert L. D. Campbell, Markus Holzmann, Zoran Hadzibabic
Comments: 4 pages, 3 figures
Journal-ref: Phys. Rev. Lett. 107, 190403 (2011)
Subjects: **Quantum Gases (cond-mat.quant-gas)**; Statistical Mechanics (cond-mat.stat-mech); Atomic Physics (physics.atom-ph); Quantum Phy (quant-ph)

[675] **arXiv:1106.6306** (cross-list from cond-mat.stat-mech) [**pdf**, **ps**, **other**]

Exact solution of a stochastic protein dynamics model with delayed degradation

Luis F. Lafuerza, Raul Toral
Subjects: **Statistical Mechanics (cond-mat.stat-mech)**; Biological Physics (physics.bio-ph)