

# Journal Scan September 2008

## From planet.pks

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List of Journal Scan Assignments.

- <br> represents a new line and # numbers the citations in your section.
- Copy and paste the template as is and omit empty lines between entries.
- Include a URL for the abstract in place of <http://abstract.citation> (the square brackets will take care of linking).
- **Remember that we decided to omit the journal details from the list in favour of a hyperlinked title.**

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## ArXiv

1. P.S. Sastry, K.P. Unnikrishnan  
Conditional probability based significance tests for sequential patterns in multi-neuronal spike trains (<http://arxiv.org/abs/0808.3511>)
2. Thomas Bose, Steffen Trimper  
A stochastic model for tumor growth with immunization (<http://arxiv.org/abs/0808.3352>)
3. Tiago P. Peixoto, Barbara Drossel  
Noise in random Boolean networks (<http://arxiv.org/abs/0808.3087>)
4. Aaron Clauset, David J. Schwab, Sidney Redner  
How many species have mass M? (<http://arxiv.org/abs/0808.3433>)

5. Craig R. Powell, Richard P. Boland  
The effects of stochastic population dynamics on food web structure (<http://arxiv.org/abs/0808.3947>)
6. Baruch Meerson, Pavel V. Sasorov  
Noise driven unlimited population growth (<http://arxiv.org/abs/0808.3854>)
7. Alexander Feigel, Avraham Englander, Assaf Engel  
Sex is always well worth its two-fold cost (<http://arxiv.org/abs/0808.3203>)
8. D. L. Pincus, S. S. Cho, C. Hyeon, D. Thirumalai  
Minimal models for proteins and RNA: From folding to function (<http://arxiv.org/abs/0808.3099>)

## Bioinformatics

1. Yung-Keun Kwon and Kwang-Hyun Cho  
Coherent coupling of feedback loops: a design principle of cell signaling networks (<http://bioinformatics.oxfordjournals.org/cgi/content/abstract/24/17/1926>)
2. Aitor González, Claudine Chaouiya and Denis Thieffry  
Logical modelling of the role of the Hh pathway in the patterning of the Drosophila wing disc (<http://bioinformatics.oxfordjournals.org/cgi/content/abstract/24/16/i234>)

## Biophysical Journal

1. P. Thomen, P. J. Lopez, U. Bockelmann, J. Guillerez, M. Dreyfus and F. Heslot  
T7 RNA Polymerase Studied by Force Measurements Varying Cofactor Concentration (<http://www.biophysj.org/cgi/content/abstract/95/5/2423>)
2. K. A. Montgomery  
Multifrequency Forcing of a Hopf Oscillator Model of the Inner Ear (<http://www.biophysj.org/cgi/content/abstract/95/3/1075>)
3. Longhua Hu, Alexander Y. Grosberg and Robijn Bruinsma  
Are DNA Transcription Factor Proteins Maxwellian Demons? (<http://www.biophysj.org/cgi/content/abstract/95/3/1151>)
4. Thomas E. Schaus and Gary G. Borisy  
Performance of a Population of Independent Filaments in Lamellipodial Protrusion (<http://www.biophysj.org/cgi/content/abstract/95/3/1393>)
5. Lili Niu and Ji Yu  
Investigating Intracellular Dynamics of FtsZ Cytoskeleton with Photoactivation Single-Molecule Tracking (<http://www.biophysj.org/cgi/content/abstract/95/4/2009>)

## Cell

1. **Author(s)**  
**Title of highlighted article (<http://abstract.citation>)**
2. Author(s)  
Title of article (<http://abstract.citation>)

## Development

1. David Strutt and Samantha J. Warrington  
Planar polarity genes in the Drosophila wing regulate the localisation of the FH3-domain protein Multiple Wing Hairs to control the site of hair production (<http://dev.biologists.org/cgi/content/abstract/135/18/3103>)
2. Masayuki Oginuma, Yasutaka Niwa, Deborah L. Chapman and Yumiko Saga  
Mesp2 and Tbx6 cooperatively create periodic patterns coupled with the clock machinery during mouse somitogenesis (<http://dev.biologists.org/cgi/content/abstract/135/15/2555>)
3. María J. García-García, Maho Shibata and Kathryn V. Anderson  
Chato, a KRAB zinc-finger protein, regulates convergent extension in the mouse embryo (<http://dev.biologists.org/cgi/content/abstract/135/18/3053>)

## European Physical Journal E

1. M. Iwamoto, F. Liu and Z.C. Ou-Yang  
Shapes of lipid monolayer domains: Solutions using elliptic functions  
(<http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/200>)
2. M. Suissa, C. Place, E. Goillot and E. Freyssingéas  
Internal dynamics of a living cell nucleus investigated by dynamic light scattering  
(<http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/200>)

## **Europhysics Letters**

1. T. Das and S. Chakraborty  
A generalized Langevin formalism of complete DNA melting transition  
(<http://stacks.iop.org/0295-5075/83/48003>)
2. Xiaofeng Gong, Li Kun and C.-H. Lai  
Optimal resource allocation for efficient transport on complex networks  
(<http://stacks.iop.org/0295-5075/83/28001>)
3. C. B. Korn and U. S. Schwarz  
Mean encounter times for cell adhesion in hydrodynamic flow: Analytical progress by dimensional reduction  
(<http://stacks.iop.org/0295-5075/83/28007>)
4. Xiao-Pu Han, Chun-Dong Hu, Zhi-Min Liu and Bing-Hong Wang  
Parameter-tuning networks: Experiments and active-walk model (<http://stacks.iop.org/0295-5075/83/28003>)

## **Journal of Cell Biology**

1. Ge Yang, Lisa A. Cameron, Paul S. Maddox, Edward D. Salmon, and Gaudenz Danuser  
Regional variation of microtubule flux reveals microtubule organization in the metaphase meiotic spindle  
(<http://abstract.citation>)
2. Marianne Uteng, Christian Hentrich, Kota Miura, Peter Bieling, and Thomas Surrey  
Poleward transport of Eg5 by dynein-dynactin in *Xenopus laevis* egg extract spindles (<http://abstract.citation>)
3. Yi-Jen Chiu, Elena McBeath, and Keigi Fujiwara  
Mechanotransduction in an extracted cell model: Fyn drives stretch- and flow-elicited PECAM-1 phosphorylation (<http://abstract.citation>)
4. Lukas C. Kapitein, Benjamin H. Kwok, Joshua S. Weinger, Christoph F. Schmidt, Tarun M. Kapoor, and Erwin J.G. Peterman  
Microtubule cross-linking triggers the directional motility of kinesin-5 (<http://abstract.citation>)
5. Alexander W. Bird and Anthony A. Hyman  
Building a spindle of the correct length in human cells requires the interaction between TPX2 and Aurora A  
(<http://abstract.citation>)
6. Hao Yuan Kueh, Guillaume T. Charras, Timothy J. Mitchison, and William M. Brieher  
Actin disassembly by cofilin, coronin, and Aip1 occurs in bursts and is inhibited by barbed-end cappers  
(<http://abstract.citation>)
7. Sarah Woolner, Lori L. O'Brien, Christiane Wiese, and William M. Bement  
Myosin-10 and actin filaments are essential for mitotic spindle function (<http://abstract.citation>)

## **Journal of Cell Science**

1. Kausalya Murthy and Patricia Wadsworth  
Dual role for microtubules in regulating cortical contractility during cytokinesis  
(<http://jcs.biologists.org/cgi/content/short/121/14/2350>)

## **Journal of the Royal Society Interface**

1. Edward A. Codling, Michael J. Plank and Simon Benhamou  
Random walk models in biology (DOI 10.1098/rsif.2008.0014)
1. Steven Hughes, Stuart McBain, Jon Dobson and Alicia J. El Haj  
Selective activation of mechanosensitive ion channels using magnetic particles (DOI 10.1098/rsif.2007.1274)

1. **John J. Tyson, Reka Albert, Albert Goldbeter, Peter Ruoff and Jill Sible**  
Biological switches and clocks (Special Issue) (DOI 10.1098/rsif.2008.0179.focus)

## Journal of Theoretical Biology

1. Angélique Stéphanou, Eleni Mylona, Mark Chaplain, Philippe Tracqui  
A computational model of cell migration coupling the growth of focal adhesions with oscillatory cell protrusions  
([http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WMD-4SF30B6-4&\\_user=42421&\\_coverDa](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WMD-4SF30B6-4&_user=42421&_coverDa))
2. Eirikur Palsson  
A 3-D model used to explore how cell adhesion and stiffness affect cell sorting and movement in multicellular systems  
([http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WMD-4SHF4SS-1&\\_user=42421&\\_coverDa](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WMD-4SHF4SS-1&_user=42421&_coverDa))
3. Anna Ochab-Marcinek  
Predicting the asymmetric response of a genetic switch to noise  
([http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WMD-4SF30B6-5&\\_user=42421&\\_coverDa](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WMD-4SF30B6-5&_user=42421&_coverDa))
4. Joanna Mazurkiewicz, Jarosław Żygierewicz and Mikołaj Korzyński  
Short term synaptic depression model—Analytical solution and analysis  
([http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WMD-4SJP7NX-1&\\_user=42421&\\_coverDa](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WMD-4SJP7NX-1&_user=42421&_coverDa))
5. Tomasz Lipniacki, Beata Hat, James R. Faeder and William S. Hlavacek  
Stochastic effects and bistability in T cell receptor signaling  
([http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WMD-4SGD505-3&\\_user=42421&\\_coverDa](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WMD-4SGD505-3&_user=42421&_coverDa))

## Nature

1. **Author(s)**  
**Title of highlighted article (<http://abstract.citation>)**
2. Martin Ackermann et al.  
Self-destructive cooperation mediated by phenotypic noise  
(<http://www.nature.com/nature/journal/v454/n7207/abs/nature07067.html>)

## Nature Cell Biology

1. **Author(s)**  
**Title of highlighted article (<http://abstract.citation>)**
2. Author(s)  
Title of article (<http://abstract.citation>)

## Nature Neuroscience

1. Yuval Nir, Roy Mukamel, Ilan Dinstein, Eran Privman, Michal Harel, Lior Fisch, Hagar Gelbard-Sagiv, Svetlana Kipervasser, Fani Andelman, Miri Y Neufeld, Uri Kramer, Amos Arieli, Itzhak Fried & Rafael Malach  
Interhemispheric correlations of slow spontaneous neuronal fluctuations revealed in human sensory cortex  
(<http://www.nature.com/neuro/journal/v11/n9/index.html>)

## Nature Physics

1. Sebastiaan Y. T. van de Meerakker, Hendrick L. Bethlem, & Gerard Meijer  
Taming Molecular Beams (Review Article) (<http://www.nature.com/nphys/journal/v4/n8/full/nphys1031.html>)
2. C. Thaury, H. George, F. Quéré, R. Loch, J.-P. Geindre, P. Monot & Ph. Martin  
Coherent dynamics of plasma mirrors (<http://www.nature.com/nphys/journal/v4/n8/full/nphys986.html>)
3. M. Poggio, M. P. Jura, C. L. Degen, M. A. Topinka, H. J. Mamin I, D. Goldhaber-Gordon & D. Rugar  
An off-board quantum point contact as a sensitive detector of cantilever motion  
(<http://www.nature.com/nphys/journal/v4/n8/full/nphys992.html>)

## Neuron

1. A.J. Hudspeth  
Making an Effort to Listen: Mechanical Amplification in the Ear  
(<http://www.neuron.org/content/article/abstract?uid=PIIS0896627308005849>)
2. Tiago Branco, Kevin Staras, Kevin J. Darcy, and Yukiko Goda  
Local Dendritic Activity Sets Release Probability at Hippocampal Synapses  
(<http://www.neuron.org/content/article/abstract?uid=PIIS089662730800576X>)

## Physical Biology

1. Francois P, Siggia ED  
A case study of evolutionary computation of biochemical adaptation  
(<http://www.iop.org/EJ/abstract/1478-3975/5/2/026009/>)
2. **Author(s)**  
**Title of highlighted article (<http://abstract.citation>)**
3. Author(s)  
Title of article (<http://abstract.citation>)

## Physical Review E

1. Axel Hutt, Connie Sutherland, and Andre Longtin  
Driving neural oscillations with correlated spatial input and topographic feedback  
(<http://scitation.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=PLEEE8000078000002021911000001&i>)

## Physical Review Letters

1. Claire Wilhelm  
Out-of-Equilibrium Microrheology inside Living Cells (<http://link.aps.org/abstract/PRL/v101/e028101>)
2. S. M. Rappaport and Y. Rabin  
Model of DNA Bending by Cooperative Binding of Proteins (<http://link.aps.org/abstract/PRL/v101/e038101>)
3. Allison P. Berke, Linda Turner, Howard C. Berg and Eric Lauga  
Hydrodynamic Attraction of Swimming Microorganisms by Surfaces  
(<http://link.aps.org/abstract/PRL/v101/e038102>)
4. Vasiliy Kantsler, Enrico Segre and Victor Steinberg  
Critical Dynamics of Vesicle Stretching Transition in Elongational Flow  
(<http://link.aps.org/abstract/PRL/v101/e048101>)
5. Renaud Trouilloud, Tony S. Yu, A. E. Hosoi and Eric Lauga  
Soft Swimming: Exploiting Deformable Interfaces for Low Reynolds Number Locomotion  
(<http://link.aps.org/abstract/PRL/v101/e048102>)
6. Thomas R. Einert, Paul Näger, Henri Orland and Roland R. Netz  
Impact of Loop Statistics on the Thermodynamics of RNA Folding  
(<http://link.aps.org/abstract/PRL/v101/e048103>)
7. Y. He, S. Burov, R. Metzler and E. Barkai  
Random Time-Scale Invariant Diffusion and Transport Coefficients  
(<http://link.aps.org/abstract/PRL/v101/e058101>)
8. Tobias Reichenbach and Erwin Frey  
Instability of Spatial Patterns and Its Ambiguous Impact on Species Diversity  
(<http://link.aps.org/abstract/PRL/v101/e058102>)
9. Mark D. McDonnell and Nigel G. Stocks  
Maximally Informative Stimuli and Tuning Curves for Sigmoidal Rate-Coding Neurons and Populations  
(<http://link.aps.org/abstract/PRL/v101/e058103>)
10. Julien Dervaux and Martine Ben Amar  
Morphogenesis of Growing Soft Tissues (<http://link.aps.org/abstract/PRL/v101/e068101>)
11. M. E. Cates, S. M. Fielding, D. Marenduzzo, E. Orlandini and J. M. Yeomans  
Shearing Active Gels Close to the Isotropic-Nematic Transition (<http://link.aps.org/abstract/PRL/v101/e068102>)
12. Mark A. Kramer, Roger D. Traub and Nancy J. Kopell  
New Dynamics in Cerebellar Purkinje Cells: Torus Canards (<http://link.aps.org/abstract/PRL/v101/e068103>)
13. Mark I. Dykman, Ira B. Schwartz and Alexandra S. Landsman

- Disease Extinction in the Presence of Random Vaccination (<http://link.aps.org/abstract/PRL/v101/e078101>)
14. Igor Belykh and Andrey Shilnikov  
When Weak Inhibition Synchronizes Strongly Desynchronizing Networks of Bursting Neurons  
(<http://link.aps.org/abstract/PRL/v101/e078102>)
  15. B. Houchmandzadeh  
Neutral Clustering in a Simple Experimental Ecological Community  
(<http://link.aps.org/abstract/PRL/v101/e078103>)
  16. Emir Haleva and Haim Diamant  
Critical Swelling of Particle-Encapsulating Vesicles (<http://link.aps.org/abstract/PRL/v101/e078104>)
  17. Colin Torney and Zoltán Neufeld  
Phototactic Clustering of Swimming Microorganisms in a Turbulent Velocity Field  
(<http://link.aps.org/abstract/PRL/v101/e078105>)
  18. Sayantan Majumdar and A. K. Sood  
Nonequilibrium Fluctuation Relation for Sheared Micellar Gel in a Jammed State  
(<http://link.aps.org/abstract/PRL/v101/e078301>)
  19. **K. M. Hill and Yi Fan**  
Isolating Segregation Mechanisms in a Split-Bottom Cell (<http://link.aps.org/abstract/PRL/v101/e088001>)
  20. William H. Nesse, Christopher A. Del Negro and Paul C. Bressloff  
Oscillation Regularity in Noise-Driven Excitable Systems with Multi-Time-Scale Adaptation  
(<http://link.aps.org/abstract/PRL/v101/e088101>)
  21. E. L. Starostin and G. H. M. van der Heijden  
Tension-Induced Multistability in Inextensible Helical Ribbons (<http://link.aps.org/abstract/PRL/v101/e084301>)

## PLoS Biology

1. **Author(s)**  
**Title of highlighted article (<http://abstract.citation>)**
2. Author(s)  
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## PLoS Computational Biology

1. Pao-Yang Chen\*, Charlotte M. Deane, Gesine Reinert  
Predicting and Validating Protein Interactions Using Network Structure  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000118>)
2. Teunis J. P. van Dam, Berend Snel  
Protein Complex Evolution Does Not Involve Extensive Network Rewiring  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000132>)
3. Christian L. Althaus\*, Rob J. De Boer  
Dynamics of Immune Escape during HIV/SIV Infection  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000103>)
4. Anton Crombach\*, Paulien Hogeweg  
Evolution of Evolvability in Gene Regulatory Networks  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000112>)
5. Nils Weinhold, Oliver Sander, Francisco S. Domingues, Thomas Lengauer, Ingolf Sommer  
Local Function Conservation in Sequence and Structure Space  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000105>)

## PNAS

1. **Bedard, S; Krishna, MMG; Mayne, L; Englander, SW**  
**Protein folding: Independent unrelated pathways or predetermined pathway with optional errors**  
(<http://abstract.citation>)
2. Chang, AJ; Bargmann, CI  
Hypoxia and the HIF-1 transcriptional pathway reorganize a neuronal circuit for oxygen-dependent behavior in *Caenorhabditis elegans* (<http://abstract.citation>)
3. Dai, HZ; Chen, Y; Chen, SD; Mao, QY; Kennedy, D; Landback, P; Eyre-Walker, A; Du, W; Long, MY

- The evolution of courtship behaviors through the origination of a new gene in *Drosophila* (<http://abstract.citation>)
4. Heller, EJ; Kaplan, L; Pollmann, F  
Inflationary dynamics for matrix eigenvalue problems (<http://abstract.citation>)
  5. Weinan, E; Li, TJ; Vanden-Eijnden, E  
Optimal partition and effective dynamics of complex networks (<http://abstract.citation>)
  6. Pessa, HKJ; Will, CL; Meng, XJ; Schneider, C; Watkins, NJ; Perala, N; Nymark, M; Turunen, JJ; Luhrmann, R; Frilander, MJ  
Minor spliceosome components are predominantly localized in the nucleus (<http://abstract.citation>)
  7. Kong, YW; Cannell, IG; de Moor, CH; Hill, K; Garside, PG; Hamilton, TL; Meijer, HA; Dobbryn, HC; Stoneley, M; Spriggs, KA; Willis, AE; Bushell, M  
The mechanism of micro-RNA-mediated translation repression is determined by the promoter of the target gene (<http://abstract.citation>)
  8. Dietrich, KA; Sindelar, CV; Brewer, PD; Downing, KH; Cremona, CR; Rice, SE  
The kinesin-1 motor protein is regulated by a direct interaction of its head and tail (<http://abstract.citation>)
  9. Eytan, E; Braunstein, L; Ganoth, D; Teichner, A; Hittle, JC; Yen, TJ; Hershko, A  
Two different mitotic checkpoint inhibitors of the anaphase-promoting complex/cyclosome antagonize the action of the activator Cdc20 (<http://abstract.citation>)
  10. Ferrer, JM; Lee, H; Chen, J; Pelz, B; Nakamura, F; Kamm, RD; Lang, MJ  
Measuring molecular rupture forces between single actin filaments and actin-binding proteins (<http://abstract.citation>)
  11. Nagy, S; Ricca, BL; Norstrom, MF; Courson, DS; Brawley, CM; Smithback, PA; Rock, RS  
A myosin motor that selects bundled actin for motility (<http://abstract.citation>)
  12. Kulic, IM; Brown, AEX; Kim, H; Kural, C; Blehm, B; Selvin, PR; Nelson, PC; Gelfand, VI  
The role of microtubule movement in bidirectional organelle transport (<http://abstract.citation>)
  13. Dephoure, N; Zhou, C; Villen, J; Beausoleil, SA; Bakalarski, CE; Elledge, SJ; Gygi, SP  
A quantitative atlas of mitotic phosphorylation (<http://abstract.citation>)
  14. Schneider, JM; Bilde, T  
Benefits of cooperation with genetic kin in a subsocial spider (<http://abstract.citation>)

## Proceedings of the Royal Society B

1. G. Gerlach, A. Hodgins-Davis, C. Avolio, and C. Schunter  
Kin recognition in zebrafish: a 24-hour window for olfactory imprinting  
(<http://journals.royalsociety.org/content/f025057851317767/>)
2. T.M. Mattila and F. Bokma  
Extant mammal body masses suggest punctuated equilibrium  
(<http://journals.royalsociety.org/content/btt2573182646w06/>)

## Science

1. Karine A. Gibbs, Mark L. Urbanowski, and E. Peter Greenberg  
Genetic Determinants of Self Identity and Social Recognition in Bacteria (<http://abstract.citation>)
2. Aaron Clauset and Douglas H. Erwin  
The Evolution and Distribution of Species Body Size (<http://abstract.citation>)  
Science 18 July 2008 321: 399-401
3. Peng Yin, Rizal F. Hariadi, Sudheer Sahu, Harry M. T. Choi, Sung Ha Park, Thomas H. LaBean, and John H. Reif  
Programming DNA Tube Circumferences (<http://abstract.citation>)  
Science 8 August 2008: 824-826.
4. Wenjian Wang, Susan S. Black, Michelle D. Edwards, Samantha Miller, Emma L. Morrison, Wendy Bartlett, Changjiang Dong, James H. Naismith, and Ian R. Booth  
The Structure of an Open Form of an *E. coli* Mechanosensitive Channel at 3.45 Å Resolution  
(<http://abstract.citation>)  
Science 29 August 2008: 1179-1183.

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