Complexity Digest 2006.07

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Previous issue 2006.06 | Next issue 2006.08

Content

   1. Alidade Incorporated's Network Centric Warfare Research, PRNewswire
2. Community Structure in the United States House of Representatives, arXiv
   1. Emergent Behavior in Agent Networks: Self-Organization in Wasp and Open Source Communities, arXiv
3. In Fitting Twist, Pairs Will Provide the First Olympic Test of New Scoring System, NY Times
   1. Journal Lays Bare Remarks From Peer Reviewers, Nature
   2. Fractals And Art: In The Hands Of A Master, Nature
4. Heat Wave of the Millennium, Science Now
5. Immunology: Exhausted T Cells Perk Up, Nature
   1. H5N1 Leaps Into Africa, Science Now
7. Toxoplasma Parasite Mind Control, Technovelgy.com
   1. Rats in a Maze Take a Moment to Remember, but in Reverse, NY Times
8. Sociology: Experimental Macro Sociology: Predicting The Next Best Seller, Science
   1. No Recipe for Superstardom, Science Now
   2. Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market, Science
9. Chance, Music, And The Ear Of The Beholder, ScienceDaily
    1. Song Post Exposure, Song Features, And Predation Risk, Behav. Ecol.
11. Speciation in Place, Science Now
    1. One Place, One Parent, Two Species, Nature
    1. Flowers and Fungi Use Scents to Mimic Each Other, Science
    2. Plant Volatile Compounds: Sensory Cues for Health and Nutritional Value?, Science
13. Sex Cell Switch, Science Now
    1. Mission Control, We Have Blast-Through, Science Now
17. Shining Light on Dark Matter, Science Now
18. Ex-C.I.A. Official Says Iraq Data Was Distorted, NY Times
    1. Censorship Is Alleged at NOAA, Washington Post
19. Complex Challenges: Global Terrorist Network
9. **Chance, Music, And The Ear Of The Beholder, [ScienceDaily](http://www.sciencedaily.com)**

*Excerpts:* By studying the way that the brain's auditory cortex responds to certain types of changes in sound, researchers have found evidence for how the brain is attuned to be especially sensitive to degrees of change in sound that the brain is most likely to encounter in the natural world. (...) The world we inhabit is constantly subjected to countless random influences that may occasionally conspire to bring about large and abrupt changes in our environment, but that more often will cancel each other out, and thus provoke only little or no change. (...)  

*Source:* [Chance, Music, And The Ear Of The Beholder](http://www.sciencedaily.com), ScienceDaily & Cell Press, 2006/02/07  
*Contributed by Atin Das - dasatin@yahoo.co.in*


*Excerpts:* We investigate the hypothesis that colour vision in primates was selected for discriminating the spectral modulations on the skin of conspecifics, presumably for the purpose of discriminating emotional states, socio-sexual signals and threat displays. Here we show that, consistent with this hypothesis, there are two dimensions of skin spectral modulations, (...). Furthermore, the M and L cone maximum sensitivities for routine trichromats are optimized for discriminating variations in blood oxygen saturation, one of the two blood-related dimensions determining skin reflectance. We also show that, consistent with the hypothesis, trichromat primates tend to be bare faced.  

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1. **Song Post Exposure, Song Features, And Predation Risk, [Behav. Ecol.](http://www.behav.org)**

*Excerpts:* Male birds use song to attract mates and deter other males, but in doing so, they also attract the attention of predators and parasites. Such viability costs are inherent in reliable signals, potentially causing females to prefer mates that display from the most exposed sites. However,