PHYSICAL REVIEW E THIRD SERIES, VOLUME 78, NUMBER 1 JULY 2008

ARTICLES

Interdisciplinary physics

Path integral approach to closed-form option pricing formulas with applications to stochastic volatility and interest rate models *(8 pages)* 016101
D. Lemmens, M. Wouters, J. Tempere, and S. Foulon

Breakup of propagating waves through the development of a transient unexcitable regime *(6 pages)* 016102
Vince Ruisi and Jichang Wang

Coevolutionary networks with homophily and heterophily *(7 pages)* 016103
Daichi Kimura and Yoshinori Hayakawa

Coevolutionary dynamics of opinions and networks: From diversity to uniformity *(4 pages)* 016104
Feng Fu and Long Wang

Enhancing synchronizability of weighted dynamical networks using betweenness centrality *(5 pages)* 016105
Mahdi Jalili, Ali Ajdari Rad, and Martin Hasler

Relaxation of synchronization on complex networks *(7 pages)* 016106
Seung-Woo Son, Hawoong Jeong, and Hyunsuk Hong

Evolving complex networks with conserved clique distributions *(6 pages)* 016107
Gregor Kaczor and Claudius Gros

Biclique communities *(9 pages)* 016108
Sune Lehmann, Martin Schwartz, and Lars Kai Hansen

Path-independent integrals to identify localized plastic events in two dimensions *(6 pages)* 016109
Mehdi Talamali, Viljo Petäjä, Damien Vandembroucq, and Stéphane Roux

Socioeconomic networks with long-range interactions *(9 pages)* 016110
Rui Carvalho and Giulia Iori

Bosonic reaction-diffusion processes on scale-free networks *(14 pages)* 016111
Andrea Baronchelli, Michele Catanzaro, and Romualdo Pastor-Satorras

Transient damage spreading and anomalous scaling in mortar crack surfaces *(5 pages)* 016112
Stéphane Morel, Daniel Bonamy, Laurent Ponson, and Elisabeth Bouchaud

Community detection in complex networks by dynamical simplex evolution *(7 pages)* 016113
V. Gudkov, V. Montealegre, S. Nussinov, and Z. Nussinov

Entropies of complex networks with hierarchically constrained topologies *(11 pages)* 016114
Ginestra Bianconi, Anthony C. C. Coolen, and Conrad J. Perez Vicente

Community detection by signaling on complex networks *(8 pages)* 016115
Yanqing Hu, Menghui Li, Peng Zhang, Ying Fan, and Zengru Di

Chaos and pattern formation

Goos-Hänchen shift and localization of optical modes in deformed microcavities *(8 pages)* 016201
Julia Unterhinninghofen, Jan Wiersig, and Martina Hentschel

Sharp versus smooth synchronization transition of locally coupled oscillators *(4 pages)* 016202
M. Ciszak, A. Montina, and F. T. Arecchi

Partially locked states in coupled oscillators due to inhomogeneous coupling *(6 pages)* 016203
Tae-Wook Ko and G. Bard Ermentrout

(Continued)