Communications in Theoretical Physics

Vol. 65, No. 4, 2016

Contents

General

Study on a General Hopf Hierarchy
Min-Jie Cui and Sen-Yue Lou 393–396

Integrability and Solutions of the $(2+1)$-dimensional Hunter–Saxton Equation
Hong-Liu Cai and Chang-Zheng Qu 397–404

Singular 1-soliton and Periodic Solutions to the Nonlinear Fisher-Type Equation with Time-Dependent Coefficients
Ozkan Guner and Ahmet Bekir 405–409

Addition Formulae of Discrete KP, q-KP and Two-Component BKP Systems
Xu Gao, Chuan-Zhong Li, and Jing-Song He 410–422

Quantification of Symmetry
Yi-Nan Fang, Guo-Hui Dong, Duan-Lu Zhou, and Chang-Pu Sun 423–433

Non-Relativistic Phase Shifts for Scattering on Generalized Radial Yukawa Potentials
O.J. Oluwadare, K.E. Thylwe, and K.J. Oyewumi 434–440

Decomposition Properties of Quantum Discord
Sunho Kim, Jun-De Wu, and Minhyung Cho 441–446

Dynamics of Super Quantum Correlations and Quantum Correlations for a System of Three Qubits
F. Siyouri, M. El Baz, S. Rfifi, and Y. Hassouni 447–452

Dynamical Change of Quantum Fisher Information of Cavity-Reservoir Systems
Jiang Huang and Qin Xie 453–459

Multiple Multi-Qubit Quantum States Sharing
Hua-Wang Qin and Yue-Wei Dai 460–464

Energy Fluctuation of Ideal Fermi Gas Trapped under Generic Power Law Potential $U = \sum_{i=1}^{d} c_i |x_i/a_i|^{n_i}$ in d Dimensions
Mir Mehedi Faruk, Md. Muktadir Rahman, Dwaipayan Debnath, and Md. Sakhawat Hossain Himel 465–468

Massive Vector Particles Tunneling from the Neutral Rotating Anti-de Sitter Black Holes in Conformal Gravity
Ran Li and Jun-Kun Zhao 469–472

Ground and Low-Lying Collective States of Rotating Three-Boson System
Mohd. Imran and M.A.H. Ahsan 473–482

(Continued)

ISSN 0253-6102
CN 11-2592/O3
Price: 108.00 Yuan

ISSN 0253-6102

Effects of $f(R)$ Model on Dynamics of Axial Shear-Free Dissipative Fluids
M. Sharif and Zunaira Nasir 483–491

Physics of Elementary Particles and Fields

F-theory and $N = 1$ Quivers from Polyvalent Geometry
Adil Belhaj and Moulay Brahim Sedra 492–498

Extending the MSSM with Singlet Higgs and Right Handed Neutrino for the Self-Interacting Dark Matter
Hai-Jing Kang and Wen-Yu Wang 499–505

Matter Effects on Neutrino Oscillations in Different Supernova Models
Jing Xu, Li-Jun Hu, Rui-Cheng Li, Xin-Heng Guo, and Bing-Lin Young 506–516

Electromagnetism, Optics, Acoustics, Heat Transfer, Classical Mechanics, and Fluid Dynamics

Size Dependent Heat Conduction in One-Dimensional Diatomic Lattices
Tejal N. Shah and P.N. Gajjar 517–522

Physics of Gases, Plasmas, and Electric Discharges

Nonlinear Saturation Amplitude in Classical Planar Richtmyer–Meshkov Instability
Wan-Hai Liu, Xiang Wang, Hong-Bin Jiang, and Wen-Fang Ma 523–526

Condensed Matter: Structural, Mechanical, and Thermal Properties

A Density Functional Theory Study of Codoping Characteristics of Sulfur with Alkaline Earth in Delafossite $CuAlO_2$
Qi-Jun Liu, Han Qin, and Zheng-Tang Liu 527–530

Condensed Matter: Electronic Structure, Electrical, Magnetic, and Optical Properties

Positron-Electron Annihilation Process in (2,2)-Difluoropropane Molecule
Yang Liu, Xiao-Guang Ma, and Ying-Hao Zhu 531–537

Geophysics, Astronomy, and Astrophysics

Agegraphic Dark Energy with the Sign-Changeable Interaction in Non-Flat Universe
You-Dong Xu and Dong-Qing Yuan 538–542