

CONTENTS

Cosmology

Concordance of Kinematics and Lensing of Elliptical Galaxies with WMAP Cosmology <i>HongSheng Zhao and Bo Qin</i>	141
The Feasibility of Constraining Dark Energy Using LAMOST Redshift Survey <i>Lei Sun, Meng Su and Zu-Hui Fan</i>	155
On the Large-Scale Structure of the Universe as given by the Voronoi Diagrams <i>L. Zaninetti</i>	387

Astrophysical processes

On the Calculation of Lyapunov Indicators with Post-stabilization in a Weyl Field <i>Xin Wu, Hong Zhang and Xiao-Sheng Wan</i>	125
An Efficient High-Resolution Shock-Capturing Scheme for Multi-Dimensional Flows I. Hydrodynamics <i>Cong Yu</i>	680

Extragalactic astronomy

Refractive Focusing by Interstellar Clouds and the Rapid Polarization Angle Swing in QSO 1150+812 <i>Shan-Jie Qian, T. P. Krichbaum, Xi-Zhen Zhang, L. Fuhrmann, G. Cimò, A. Kraus, T. Beckert, S. Britzen, A. Witzel and J.A. Zensus</i>	1
Elliptical Galaxies with Emission Lines from the Sloan Digital Sky Survey <i>Ying-He Zhao, Qiu-Sheng Gu, Zhi-Xin Peng, Lei Shi, Xin-Lian Luo and Qiu-He Peng</i>	15
A Multiwavelength Study of the Jets in FR-I Radio Galaxies: I. Data and Analysis <i>Da-Min Meng and Hong-Yan Zhou</i>	25
Super-Large-Scale Structures in the Sloan Digital Sky Survey <i>Xin-Fa Deng, Yi-Qing Chen, Qun Zhang and Ji-Zhou He</i>	35
Scale Heights of Non-Edge-on Spiral Galaxies <i>Tao Hu, Qiu-He Peng and Ying-He Zhao</i>	43
Comptonization and Reprocessing Processes in Accretion Disks: Applications to the Seyfert 1 Galaxies NGC 5548 and NGC 4051 <i>Fan Zhang and Xue-Bing Wu</i>	165
The Inclination, Pitch Angle and Forbidden Radius of Spiral Arms of PGC 35105 <i>Tao Hu, Zheng-Yi Shao and Qiu-He Peng</i>	175
A Deprojection Analysis of Abell 1650 with <i>XMM-Newton</i> <i>Shu-Mei Jia, Yong Chen and Li Chen</i>	181
A Catalog of Luminous Infrared Galaxies in the <i>IRAS</i> Survey and Second Data Release of SDSS <i>Chen Cao, Hong Wu, Jian-Ling Wang, Cai-Na Hao, Zu-Gan Deng, Xiao-Yang Xia and Zhen-Long Zou</i>	197
SDSS J143030.22-001115.1: A Misclassified Narrow-line Seyfert 1 Galaxy with Flat X-ray Spectrum <i>Wei-Hao Bian, Quan-Ling Cui and Li-Hua Chao</i>	281
Estimating Black Hole Masses of AGNs using Ultraviolet Emission Line Properties <i>Min-Zhi Kong, Xue-Bing Wu, Ran Wang and Jin-Lin Han</i>	396
Isolated Main Galaxy Pairs from the SDSS Data Release 4 <i>Xin-Fa Deng, Yi-Qing Chen, Ping Wu, Cheng-Hong Luo and Ji-Zhou He</i>	411
A Periodicity Analysis of the Light Curve of 3C 454.3 <i>Huai-Zhen Li, Guang-Zhong Xie, Shu-Bai Zhou, Hong-Tao Liu, Guang-Wei Cha, Li Ma</i>	

<i>and Li-Sheng Mao</i>	421
Re-Identification of the ‘Enigmatic’ X-ray Source 1RXS J114003.0+124112 <i>Jiang-Hua Wu, Tigran Movsessian, Yang Chen, Xiang-Tao He, Xu Zhou and Jun Ma</i>	430
Statistical Cluster-QSO Weak Lensing in the Sloan Digital Sky Survey <i>Zhong-Lue Wen, Yan-Bin Yang, Xu Zhou, Qi-Rong Yuan and Jun Ma</i>	521
High Brightness Temperatures in IDV Sources <i>Shan-Jie Qian, T. P. Krichbaum, A. Witzel, J. A. Zensus and Xi-Zhen Zhang</i>	530
Chemical Evolution of Blue Compact Galaxies <i>Fei Shi, Xu Kong and Fu-Zhen Cheng</i>	641
On the Geometry of Broad-Line Regions in BL Lac Objects <i>Yun Xu and Xin-Wu Cao</i>	649
Do Radio-loud Active Galactic Nuclei really follow the same $M_{\text{BH}}-\sigma_*$ Relation as Normal Galaxies? <i>Yi Liu and Dong-Rong Jiang</i>	655
Chaotic Feature in the Light Curve of 3C 273 <i>Lei Liu</i>	663
A Study of Binary Stellar Population Synthesis of Elliptical Galaxies <i>Zhong-Mu Li, Feng-Hui Zhang, and Zhan-Wen Han</i>	669
Stellar clusters	
Kinematics of the Open Cluster System in the Galaxy <i>Jun-Liang Zhao, Li Chen and Zhong-Liang Zu</i>	287
Membership and Segregation Effects in the Young Open Cluster NGC 6530 <i>Jun-Liang Zhao, Li Chen and Wen Wen</i>	435
Stars	
The Relationship between the Rise Width and the Full Width of γ -ray Burst Pulses and Its Implications <i>Rui-Jing Lu, Yi-Ping Qin and Ting-Feng Yi</i>	52
A Study of the Molecular Cloud S64 with Multiple Lines of CO Isotopes <i>Lei Zhu, Yue-Fang Wu and Yue Wei</i>	61
Different Features of Jets and Isotropic Fireballs in Gamma-ray Burst Phase <i>Yun-Ming Dong, Lan-Wei Jia and Xiao-Hong Zhao</i>	69
Molecular Gas Distribution around the Supernova Remnant G40.5-0.5 <i>Ji Yang, Jie-Long Zhang, Zhi-Yong Cai, Deng-Rong Lu and You-Heng Tan</i>	210
Current Flows in Pulsar Magnetospheres <i>Ren-Xin Xu, Xiao-Hong Cui and Guo-Jun Qiao</i>	217
A Non-axisymmetric Spherical α^2 -Dynamo <i>Jie Jiang and Jing-Xiu Wang</i>	227
Circular Polarization in Pulsar Integrated Profiles: Updates <i>Xiao-Peng You and Jin-lin Han</i>	237
Stellar Abundance and Galactic Chemical Evolution through LAMOST Spectroscopic Survey <i>Gang Zhao, Yu-Qin Chen, Jian-Rong Shi, Yan-Chun Liang, Jin-Liang Hou, Li Chen, Hua-Wei Zhang and Ai-Gen Li</i>	265
The Origin of Glitches in Pulsars — Phase Oscillation between Anisotropic Superfluid and Normal State of Neutrons in Neutron Stars <i>Qiu-He Peng, Zhi-Quan Luo and Chih-Kang Chou</i>	297
On the Evolution of the Apparent Size of Gamma-Ray Burst Remnants <i>Ting-Ting Gao and Yong-Feng Huang</i>	305
Relative Spectral Lag: a New Redshift Indicator of Gamma-ray Bursts <i>Zhi-Bin Zhang, Jia-Gan Deng, Rui-Jing Lu and Hai-Feng Gao</i>	312
A One-Dimensional Relativistic Shock Model for the Light Curve of Gamma-ray Bursts <i>Cheng-Yue Su, Yi-Ping Qin, Jun-Hui Fan and Zhang-Yu Han</i>	323
On the Period Variation of the W UMa-type Contact Binary V502 Ophiuchi	

<i>Qing-Yao Liu and Yu-Lan Yang</i>	331
Population Synthesis for the Symbiotic Stars with Main-sequence Accretors	
<i>Guo-Liang Lü, Chun-Hua Zhu, Bin Wu and Zhan-Wen Han</i>	447
Collapse Velocity and Prompt Explosion for the Presupernova Model $Ws15M_{\odot}$	
<i>Zhi-Quan Luo, Men-Quan Liu, Qiu-He Peng and Zuo-Heng Xie</i>	455
The Relation between the Critical Accretion Rate of Progenitors of SNe Ia and Metallicity	
<i>Xiang-Cun Meng, Xue-Fei Chen, Christopher A. Tout and Zhan-Wen Han</i>	461
Short-living Supermassive Magnetar Model for the Early X-ray Flares Following Short GRBs	
<i>Wei-Hong Gao and Yi-Zhong Fan</i>	513
G328: A Small-Amplitude Red Variable with a Period Near One Day	
<i>Bao-An Yao, Chang-Jun Shen, Chun-Sheng Zhang, Han-Ming Hu and Qing Lin</i>	517
Radio Spectra of Three Supernova Remnants: G114.3+0.3, G116.5+1.1 and G116.9+0.2	
<i>Wen-Wu Tian and Denis Leahy</i>	543
Tail Emission from a Ring-like Jet: Its Application to Shallow Decays of Early Afterglows and GRB 050709	
<i>Yuan-Chuan Zou and Zi-Gao Dai</i>	551
The Early X-ray Afterglows of Optically Bright and Dark Gamma-Ray Bursts	
<i>Yi-Qing Lin</i>	555
Constraining Dark Energy and Cosmological Transition Redshift with Type Ia Supernovae	
<i>Fa-Yin Wang and Zi-Gao Dai</i>	561
Toward an Understanding of the Periastron Puzzle of PSR B1259–63	
<i>Ren-Xin Xu</i>	572
High Resolution Spectroscopy of Halo Stars in the Near UV and Blue Region	
I. Spectra in the Wavelength Region 3550–5000 Å	
<i>V. G. Klochkova, Gang Zhao, S. V. Ermakov and V. E. Panchuk</i>	579
Automatic Normalization and Equivalent-Width Measurement of High-Resolution Stellar Spectra	
<i>Jing-Kun Zhao, Gang Zhao, Yu-Qin Chen, Jian-Rong Shi, Yu-Juan Liu and Ju-Yong Zhang</i>	689
Newly Identified Silicate Carbon Stars from IRAS Low-Resolution Spectra	
<i>Pei-Sheng Chen and Pin Zhang</i>	697
Chaos in Compact Binaries with Frequency Map Analysis	
<i>Yi Xie and Tian-Yi Huang</i>	705
Photometric Monitoring of ROSAT-Selected Weak Line T Tauri Stars	
<i>Li-Feng Xing, Xiao-Bin Zhang and Jian-Yan Wei</i>	716
The Magnetic Field Effect on Planetary Nebulae	
<i>A. R. Khesali and K. Kokabi</i>	723
The solar system	
Formation of the Kuiper Belt by Long Time-Scale Migration of Jovian Planets	
<i>Jian Li, Li-Yong Zhou and Yi-Sui Sun</i>	588
CCD Photometry of Asteroid (147) Protogeneia	
<i>Xi-Liang Zhang, Xiao-Bin Wang and Li-Yun Zhang</i>	729
The Sun	
Energy Buildup, Flux Confinement and Helicity Accumulation in the Solar Corona	
<i>You-Qiu Hu and Wen Li</i>	77
Three-dimensional Distribution of the Escape Photons of $H\alpha$ Flares	
<i>Ming-Guo Sun, Zhong-Quan Qu, Zhi Xu, Xiao-Yu Zhang, Cheng-Lin Xu, Shuai Wang and Chun-Lan Jin</i>	87
Magnetic Helicity Injection in Solar Active Regions	
<i>Hong-Qi Zhang</i>	96
Time Evolution of the Turnover Frequency for Diagnosis of the Coronal Magnetic Field	
<i>Guang-Li Huang</i>	113
Transequatorial Filament Eruption and Its Link to a Coronal Mass Ejection	
<i>Jing-Xiu Wang, Gui-Ping Zhou, Ya-Yuan Wen, Yu-Zong Zhang, Hua-Ning Wang,</i>	

<i>Yuan-Yong Deng, Jun Zhang and Louise K. Harra</i>	247
The Gyrosynchrotron Radiation Spectrum in a Nonuniform Source	
<i>Ai-Hua Zhou</i>	260
A New Method to Determine Epochs of Solar Cycle Extrema	
<i>Zhan-Le Du, Hua-Ning Wang and Xiang-Tao He</i>	338
The Filament Eruption of 1999 March 21 and Its Associated Coronal Dimmings and CME	
<i>Yun-Chun Jiang, Le-Ping Li and Li-Heng Yang</i>	345
Evolution of the Level of Sunspot Activity in Solar Cycles I. Evolution in Descending Phase	
<i>Jia-Long Wang</i>	354
Vector Magnetic Field Measurement of NOAA AR 10197	
<i>Hong-Fei Liang, Hai-Juan Zhao and Fu-Yuan Xiang</i>	470
The Relationship between Magnetic Gradient and Magnetic Shear in Five Super Active Regions Producing Great Flares	
<i>Hai-Min Wang, Hui Song, Ju Jing, Vasyl Yurchyshyn, Yuan-Yong Deng, Hong-Qi Zhang, David Falconer and Jing Li</i>	477
The Relation between the Amplitude and the Period of Solar Cycles	
<i>Zhan-Le Du, Hua-Ning Wang and Xiang-Tao He</i>	489
Spectral Analysis and Atmospheric Models of Microflares	
<i>Cheng Fang, Yu-Hua Tang and Zhi Xu</i>	597
An Impulsive Heating Model for the Evolution of Coronal Loops	
<i>Li Feng and Wei-Qun Gan</i>	608
Derivation of the Spiral Motion of an Eruptive Prominence and Its Explanation	
<i>Xiao-Ma Gu, Shu-Hua Zhong, Hong-Fei Liang and La-Sheng Zhan</i>	617
Solar Impulsive Hard X-Ray Emission and Two-Stage Electron Acceleration	
<i>Tian-Xi Zhang, Arjun Tan and Shi Tsan Wu</i>	733
Formation of the CME Leading Edge Observed in the 2003 February 18 Event	
<i>Xing-Ming Bao, Hong-Qi Zhang and Jun Lin</i>	741
Solar Energetic Particle Event of 2005 January 20: Release Times And Possible Sources	
<i>Gui-Ming Le, Yu-Hua Tang and Yan-Ben Han</i>	751
Astrometry and celestial mechanics	
Atmospheric Excitation of Time Variable Length-of-Day on Seasonal Scales	
<i>Li-Hua Ma and Yan-Ben Han</i>	120
Velocity Space of Galactic O-B Stars	
<i>Zi Zhu</i>	363
On the Station-Keeping and Control of the World Space Observatory/Ultraviolet	
<i>Xi-Yun Hou, Hai-Hong Wang and Lin Liu</i>	372
Atmospheric and Oceanic Excitations to LOD Change on Quasi-biennial Time Scales	
<i>Li-Hua Ma, De-Chun Liao and Yan-Ben Han</i>	759
Instruments, observational techniques and data processing	
VOFilter: Bridging Virtual Observatory and Industrial Office Applications	
<i>Chen-Zhou Cui, Markus Dolensky, Peter Quinn, Yong-Heng Zhao and Françoise Genova</i> ...	379
Image Field Deformation of LAMOST due to Differential Atmospheric Refraction	
<i>Jin-Ling Li, Bo Zhang, Yong Yu, Zhao-Xiang Qi and Ming Zhao</i>	495
Comparison between Windowed FFT and Hilbert-Huang Transform for Analyzing Time Series with Poissonian Fluctuations: A Case Study	
<i>Dong Han and Shuang-Nan Zhang</i>	503
History of astronomy	
Historical Evidence for the Birth of the Newly Discovered Pulsar PSR J1833–1034	
<i>Zhen-Ru Wang, Min Li and Yi Zhao</i>	625
Observational Accuracy of Sunrise and Sunset Times in the Sixth Century China	
<i>Yong Li</i>	629
The Guest Star of AD185 must have been a Supernova	
<i>Fu-Yuan Zhao, R. G. Strom and Shi-Yang Jiang</i>	635