

Chinese Journal of Astronomy and Astrophysics

SUBJECT INDEX (2003)

Cosmology

Rhombic Cell Analysis – A New Way of Probing the Large-Scale Structure of the Universe. I. General Considerations	
<i>Tao Kiang</i>	95
Early Tracking Behavior in Small-field Quintessence Models	
<i>Wei Wang and Bo Feng</i>	105
The Universe With Bulk Viscosity	
<i>Arbab I. Arbab</i>	113
Resolved SZE Cluster Count	
<i>Jia-Yu Tang and Zu-Hui Fan</i>	191
A Check on the Cardassian Expansion Model with Type-Ia Supernovae Data	
<i>Li Cao</i>	341
Time Scales and Tidal Effects in Minor Mergers	
<i>Yu Lu and Jian-Yan Wei</i>	395
Relativistic Corrections to the Thermal Sunyaev-Zel'dovich Power Spectrum	
<i>Hai-Ning Li</i>	410

Extragalactic astronomy

Polarization Position Angle Swings caused by Relativistic Effects	
<i>Shan-Jie Qian and Xi-Zhen Zhang</i>	75
On the Black Hole – Bulge Mass Ratios in Narrow-Line Seyfert 1 Galaxies	
<i>Wei-Hao Bian and Yong-Heng Zhao</i>	119
Nuclear Starburst Activity in the Seyfert 2 Galaxy NGC 2273	
<i>Qiu-Sheng Gu, Lei Shi, Shi-Jun Lei, Wen-Hao Liu and Jie-Hao Huang</i>	203
On the Correlation between Radio Properties and Black Hole Mass of Quasars	
<i>Xue-Guang Zhang, Ting-Gui Wang and You-Jun Lu</i>	212
On the Spectral Index-Flux Density Relation for Large Samples of Radio Sources	
<i>Xi-Zhen Zhang, W. Reich, P. Reich and R. Wielebinski</i>	347
Spectral Indices of Core and Extended Components of Extragalactic Radio Sources	
<i>Jiang-Shui Zhang and Jun-Hui Fan</i>	415
Discovery of Five Narrow-Line Seyfert 1 Galaxies and Implications on the NLS1 Model	
<i>Jiang-Hua Wu, Xiang-Tao He, Yang Chen and Wolfgang Voges</i>	423
Vertical Scale Parameter Estimates for 48 Non-edge-on Spiral Galaxies	
<i>Jun Ma</i>	499
The Two Mini-lobes of the CSO OQ208 — VLBI Observations at 5 GHz and 8.4 GHz	
<i>Wei-Hua Wang, Xiao-Yu Hong and Tao An</i>	505

The Binary Black Hole Scenario for the BL Lacertae Object AO 0235+16 G. E. Romero, Jun-Hui Fan and S. E. Nuza	513
Stars	
What Can the Redshift Observed in EXO 0748–676 Tell Us? <i>Ren-Xin Xu</i>	33
Statistical Properties of the Highest Pulses in Gamma-Ray Bursts <i>Yi-Ping Qin, En-Wei Liang, Guang-Zhong Xie and Cheng-Yue Su</i>	38
Statistical Properties of 6.7 GHz Methanol Maser Sources <i>Ye Xu, Xing-Wu Zheng and Dong-Rong Jiang</i>	49
A Study of Star Formation in BRC18 <i>Sheng-Li Qin and Yue-Fang Wu</i>	69
Statistics of the Instability Strip of β Cephei Stars <i>Bin Tian, Hui Men, Li-Cai Deng, Da-Run Xiong and Hui-Lai Cao</i>	125
A Kinematical Study of the NGC 7538 IRS 1 Region <i>Ye Xu, Xing-Wu Zheng and Dong-Rong Jiang</i>	133
A Possible Explanation of the O'Connell Effect in Close Binary Stars <i>Qing-Yao Liu and Yu-Lan Yang</i>	142
Searching for Variable Stars in the Field of NGC 7789 <i>Xiao-Bin Zhang, Li-Cai Deng, Yu Xin and Xu Zhou</i>	151
An Estimation of the Initial Period of Pulsars <i>Zhan-Kui Huang and Xin-Ji Wu</i>	166
Cylindrical Jet – Wind Interaction Model of Gamma-Ray Burst Afterglows <i>Hai-Tao Ma, Yong-Feng Huang, Zi-Gao Dai and Tan Lu</i>	225
Fibonacci Sequences and the Multiperiodicity of the Variable Star UW Herculis <i>Juan García Escudero</i>	235
Measuring the Fundamental Parameters of Hot Hydrogen-Rich White Dwarfs <i>M. A. Barstow</i>	287
Discovery of Four Peculiar Variable Stars <i>Xiao-Bin Zhang and Rong-Xian Zhang</i>	311
A Study of Neutron Star Structure in Strong Magnetic Fields that includes Anomalous Magnetic Moments <i>Guang-Jun Mao, Akira Iwamoto and Zhu-Xia Li</i>	359
Can the Inner Gap Sparking Take Place in Millisecond Pulsars? <i>Hong-Guang Wang, Guo-Jun Qiao and Ren-Xin Xu</i>	443
Lithium Abundance of Metal-poor Stars <i>Hua-Wei Zhang and Gang Zhao</i>	453
Large-Scale Distribution of Herbig-Haro Objects in Taurus <i>Ke-Feng Sun, Ji Yang, Shao-Guang Luo, Min Wang, Li-Cai Deng, Xu Zhou and Jian-Sheng Chen</i>	458
An Analysis of Average Pulsar Profiles and A Study of the ρ -P relation of Pulsars <i>Hua-Xiang Wang and Xin-Ji Wu</i>	469

Discovery of an Optical Jet in the Rosette Nebula: Rosette HH2 <i>Jin-Zeng Li</i>	495
Extinction of Beamed Gamma-ray Burst Afterglows in a Dense Circumstellar Cloud <i>Shun-Lin Liang, Zi-Gao Dai, Yong-Feng Huang and Tan Lu</i>	526
Strange Stars: Can Their Crust Reach the Neutron Drip Density? <i>Hai Fu and Yong-Feng Huang</i>	535
Spectral Properties of Anomalous X-ray Pulsars <i>Ye Lu, Wei Wang and Yong-Heng Zhao</i>	543
The Chemical Classification of the AGB Star IRAS 17515–2407 <i>Pei-Sheng Chen and Pin Zhang</i>	551
The Galaxy	
Non-LTE Analysis of Sodium Abundance of Metal-Poor Stars in the Galactic Disk and Halo <i>Yoichi Takeda, Gang Zhao, Masahide Takada-Hidai, Yu-Qin Chen, Yu-ji Saito and Hua-Wei Zhang</i>	316
Galactic Chemical Evolution of the Lighter Neutron Capture Elements Sr, Y and Zr <i>Cui-Hua Du, Bo Zhang, Han-Feng Song and Qiu-He Peng</i>	431
The Sun	
The Kinematic Theory of Solar Dynamo <i>Ke-Ke Zhang and Xin-Hao Liao</i>	12
The H β Chromospheric Magnetic Field in a Quiescent Filament <i>Xing-Ming Bao and Hong-Qi Zhang</i>	87
Size-Flux Relation in Solar Active Regions* <i>O. V. Chumak and Hong-Qi Zhang</i>	175
Coronal Flux Rope Equilibria in Closed Magnetic Fields <i>Zhen Wang and You-Qiu Hu</i>	241
A Fluid Dynamics Approach for the Computation of Nonlinear Force-Free Magnetic Field <i>Jing-Qun Li, Jing-Xiu Wang and Feng-Si Wei</i>	247
Distribution of Helical Properties of Solar Magnetic Fields <i>Kirill M. Kuzanyan, Victor G. Lamburt, Hong-Qi Zhang and Shu-Dong Bao</i>	257
H α Line Polarization in the 2B/X4.8 Flare of 2002 July 23 <i>Zhi Xu, N. M. Firstova, Qing-Rong Chen and Cheng Fang</i>	266
Near Real-Time Calculation of Ionospheric Electric Fields and Currents Using GEDAS <i>H. Shirai, Y. Kamide, E. A. Kihm, B. Hausman, M. Shinohara, H. Nakata, M. Isowa, T. K. Takada, Y. Watanabe and S. Masuda</i>	375
Solar Partial N-burst <i>Zong-Jun Ning, Yu-Ying Liu, Qi-Jun Fu and Fu-Ying Xu</i>	381
Wavelet Analysis of Several Important Periodic Properties in the Relative Sunspot Numbers <i>Gui-Ming Le and Jia-Long Wang</i>	391

Three Super Active Regions in the Descending Phase of Solar Cycle 23 <i>Hong-Qi Zhang, Xing-Ming Bao, Yin Zhang, Ji-Hong Liu, Shu-Dong Bao, Yuan-Yong Deng, Wei Li, Jie Chen, Jin-Ping Dun, Jiang-Tao Su, Juan Guo, Xiao-Fan Wang, Ke-Liang Hu, Gang-Hua Lin and Dong-Guang Wang</i>	491
Magnetic Energy of Force-Free Fields with Detached Field Lines <i>Guo-Qiang Li and You-Qiu Hu</i>	555
Verification of Short-Term Predictions of Solar Soft X-ray Bursts for the Maximum Phase (2000–2001) of Solar Cycle 23 <i>Cui-Lian Zhu and Jia-Long Wang</i>	563
Astrometry and celestial mechanics	
A Check on the Variations of Earth's Rotation with an Ancient Solar Eclipse <i>Yan-Ben Han and Qi-Yuan Qiao</i>	569
Instruments, observational techniques and data processing	
"Small Equipment Strategy" in the Development of Astronomy <i>Shou-Guan Wang</i>	1
Learning Vector Quantization for Classifying Astronomical Objects <i>Yan-Xia Zhang and Yong-Heng Zhao</i>	183
Automated Separation of Stars and Normal Galaxies Based on Statistical Mixture Modeling with RBF Neural Networks <i>Dong-Mei Qin, Ping Guo, Zhan-Yi Hu and Yong-Heng Zhao</i>	277
A Study of the Fitting Accuracy of the Active Reflector for a Large Spherical Radio Telescope <i>Xiao-Qiang Tang, Jin-Song Wang and Qi-Ming Wang</i>	478
A Tilt-correction Adaptive Optical System for the Solar Telescope of Nanjing University <i>Chang-Hui Rao, Wen-Han Jiang, Cheng Fang, Ning Ling, Wei-Chao Zhou, Ming-De Ding, Xue-Jun Zhang, Dong-Hong Chen, Mei Li, Xiu-Fa Gao and Tian Mi</i>	576
Wavelet Analysis of Space Solar Telescope Images <i>Xi-An Zhu, Sheng-Zhen Jin, Jing-Yu Wang and Shu-Nian Ning</i>	587