

# Research in Astronomy and Astrophysics

Vol. 24 No. 8

August 2024

## CONTENTS

Perturbing the Stable Accretion Disk in Kerr and 4D Einstein – Gauss – Bonnet Gravities: Comprehensive Analysis of Instabilities and Dynamics <i>Orhan Donmez</i> .....	085001
Investigation of WZ Sge-type Dwarf Nova ASASSN-19oc: Optical Spectroscopy and Multicolor Light Curve Analysis <i>Viktoriia Krushevska, Sergey Shugarov, Paolo Ochner, Yuliana Kuznyetsova, Mykola Petrov et al.</i> .....	085002
GRB 210323A: Signature of Long-lasting Lifetime of Supra-massive Magnetar as the Central Engine from the Merger of Binary Neutron Star <i>Yingze Shan, Xiaoxuan Liu, Xing Yang, Haoyu Yuan and Houjun Lü</i> .....	085003
Simulation Study on Constraining Gravitational Wave Propagation Speed by Gravitational Wave and Gamma-ray Burst Joint Observation on Binary Neutron Star Mergers <i>Jin-Hui Rao, Shu-Xu Yi, Lian Tao and Qing-Wen Tang</i> .....	085004
Observation of HI around three Satellite Galaxies of M31 with FAST: Andromeda II, NGC 205, and NGC 185 <i>Ziming Liu, Jie Wang, Yingjie Jing, Chen Xu, Tiantian Liang et al.</i> .....	085005
Multi-field Split Curvature Wavefront Sensing and its Application in the Large Field Survey Telescope <i>Zhixu Wu, Yiming Zhang, Jianan Cong, Hua Bai, Yong Xia et al.</i> .....	085006
A Comprehensive Classification and Analysis of Geomagnetic Storms Over Solar Cycle 24 <i>Raja Adibah Raja Halim Shah, Nurul Shazana Abdul Hamid, Mardina Abdullah et al.</i> .....	085007
The Influence of Different Solar System Planetary Ephemerides on Pulsar Timing <i>Dai Jian-peng, Wei Han and Na Wang</i> .....	085008
HiFAST: An HI Data Calibration and Imaging Pipeline for FAST. II. Flux Density Calibration <i>Ziming Liu, Jie Wang, Yingjie Jing, Zhi-Yu Zhang, Chen Xu et al.</i> .....	085009
The FRB-searching Pipeline of the Tianlai Cylinder Pathfinder Array <i>Zijie Yu, Furen Deng, Shijie Sun, Chenhui Niu, Jixia Li et al.</i> .....	085010
The Astrometric Performance of the China Space Station Telescope (CSST) Sky Survey in Extending the Gaia Celestial Reference Frame <i>Jun Yao, Jia-Cheng Liu, Niu Liu, Zi Zhu and Zhen-Wei Wang</i> .....	085011
Charged Particles Capture Cross-section by a Weakly Charged Schwarzschild Black Hole <i>A. M. Al Zahrani and A. Al-Jama</i> .....	085012
Understanding the Activity Performance of Comets 38P/Stephan-Oterma, 64P/Swift-Gehrels and C/2017 M4 (ATLAS) through Broadband Photometric Observations <i>Xuan Zhang, Jin-Zhong Liu and Le-Tian Wang</i> .....	085013
Pulsations of Three Rapidly Oscillating Ap Stars TIC 96315731, TIC 72392575, and TIC 318007796 <i>Hai-Jian Zhong, Dong-Xiang Shen, Chun-Hua Zhu, He-Lei Liu, Su-Fen Guo and Guo-Liang Lü</i> .....	085014
Detection of Increasing $\gamma$ -Ray Emissions from 4FGL J1718.5+4237 with Fermi-LAT <i>Jiao Zheng, Pengfei Zhang and Li Zhang</i> .....	085015
X-Ray Source Classification Using Machine Learning: A Study with EP-WXT Pathfinder LEIA <i>Xiaoxiong Zuo, Yihan Tao, Yuan Liu, Yunfei Xu, Wenda Zhang et al.</i> .....	085016
Photometric Studies of EV Cnc and AH Cnc in the Open Cluster M67 <i>Mamatha Rani G., K. Sriram, Deblina Lahiri and Vijaya, A.</i> .....	085017
Photometric and Spectroscopic Study of Ten Low Mass Ratio Contact Binary Systems: Orbital Stability, O'Connell Effect and Infrared Calcium Line Filling <i>Surjit S. Wadhwa, Adam Popowicz, Raúl Michel, Petar Kostić, Oliver Vince et al.</i> .....	085018