

11th Southeast Asia Astronomy Networking Meeting (SEAN Meeting 2019)

EPJ Web of Conferences Volume 240 (2020)

Singapore
26 - 28 December 2019

Editors:

**W.K. Ng
A. Yang
S.C.C. Ng**

**A.H. Chan
C.H. Sow**

ISBN: 978-1-7138-1796-3

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 4.0 International License. License details:
<http://creativecommons.org/licenses/by/4.0/>.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2021)

For additional information, please contact EDP Sciences – Web of Conferences at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75

Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

FOREWORD	1
<i>Soonthornthum Boonrucksar, Malasan Hakim L., Chey Chan Oeurn, Abu Kassim Hasan, Myint Khin Swe, Celebre Cynthia, Diep Pham Ngoc, Yang Abel</i>	
CAPTURING A TOTAL SOLAR ECLIPSE	6
<i>Koh Joo Beng</i>	
HIGH-RESOLUTION SOLAR IMAGING FOR CITIZEN SCIENCE	21
<i>Tan Alfred Yong Liang</i>	
MODIFIED STATISTICAL ANALYSIS OF SNEIA DATA	38
<i>Goh Lisa, Ng Cindy</i>	
A PHENOMENOLOGICAL MODEL OF EFFECTIVELY OSCILLATING MASSLESS NEUTRINOS AND ITS IMPLICATIONS	52
<i>Lu Jianlong, Chan Aik Hui, Oh Choo Hiap</i>	
ANALYTICAL TREATMENT OF SMALL SCALES MATTER POWER SPECTRUM IN COUPLED SCALAR FIELD (CSF) COSMOLOGY	61
<i>Mulki Fargiza A. M., Wulandari Hesti</i>	
ASTROPHYSICS RESEARCH AT DAP	68
<i>Diep P.N., Hoai D.T., Nhung P.T., Phuong N.T., Thai T.T., Tuan-Anh P., Darriulat P.</i>	
TRACING BLACK HOLE SIGNATURES IN SEVERAL BLACK HOLE CANDIDATES BASED ON THEIR X-RAY SPECTRAL EVOLUTION	77
<i>Alfarizki Fahmi Iman, Vierdayanti Kiki</i>	
DETERMINATION OF THE LOCAL DARK MATTER DENSITY USING K-DWARFS FROM GAIA DR2	87
<i>Wardana M. Dafa, Wulandari Hesti, Sulistiyowati, Khatami Akbar H.</i>	
ON THE ORIGIN OF HIGH DOPPLER VELOCITY WINGS IN THE SPECTRA OF O-RICH AGB STARS	98
<i>Hoai Do Thi, Nhung Pham Tuyet, Tuan-Anh Pham, Darriulat Pierre, Diep Pham Ngoc, Phuong Nguyen Thi, Thai Tran Thi</i>	
PULSATIONS IN ALGOLS	108
<i>Mkrtichian David, Gunsriwiwat Khemsinan, Engelbrecht Chris, A-thano Napaporn, Nazarenko Victor</i>	
HOT MAGNETIC STARS IN EXOTIC MULTIPLE SYSTEMS	114
<i>Semenko Eugene</i>	
PREDICTIVE AND CHARACTERIZED PULSAR EVOLUTION FROM ITS OPTICAL PULSATION	124
<i>Masong Rizchel</i>	
ON MULTIPARTICLE PRODUCTION IN VERY HIGH ENERGY SCATTERING	131
<i>Agarwal Pulkit, Ang Han Wei, Ong Zongjin, Chan Aik Hui, Oh Choo Hiap</i>	
EFFECTS OF PHASE SPACE VARIABLES ON OSCILLATIONS OF MODIFIED COMBINANTS	138
<i>Ang H.W., Ong Z., Agarwal P., Chan A.H., Oh C.H.</i>	
INVESTIGATION OF THE SUDDEN SOLAR IONOSPHERIC DISTURBANCE USING RADIO TELESCOPE	143
<i>Aqasha Adam, Zheng Andrien, Athreya Sneha, Tan Hoe Teck</i>	
DEVELOPMENT OF A RADIO TELESCOPE FOR VERY LOW FREQUENCY OBSERVATIONS	152
<i>Gupta Arpit, Kit Hint Seow, Shangyu Cao, Tan Hoe Teck</i>	
PROBING SUPERCRITICAL ACCRETION IN ULTRALUMINOUS X-RAY SOURCE M82 X-1 BY MEANS OF X-RAY SPECTRAL EVOLUTION ANALYSIS	157
<i>Hafizah Izatul, Vierdayanti Kiki</i>	
TRANSVERSE ENERGY DENSITY IN HIGH ENERGY HEAVY ION COLLISIONS	164
<i>Lim Kian Hwee, Chan Aik Hui, Oh Choo Hiap</i>	
A STUDY OF ETHNOASTRONOMY IN CIPTAGELAR CIVILIZATIONS, SUKABUMI REGENCY, WEST JAVA, INDONESIA: RELATION OF FULL MOON PHASE WITH JAVANESE CALENDAR AND HIJRIYAH CALENDAR	171
<i>Muthia Dewi, Aprilia</i>	
GALACTIC WARP FROM THE KINEMATICS OF OB STARS	184
<i>Nurhidayat Rizky Maulana, Arifyanto Mochamad Ikbal, Puspitarini Lucky</i>	
NUMERICAL SOLUTIONS TO GIOVANNINI'S QCD PARTON BRANCHING PROCESSES	190
<i>Ong Z., Agarwal P., Ang H.W., Wang E., Chan A.H., Oh C.H.</i>	

NONLINEAR DIRAC NEUTRINO OSCILLATIONS	194
<i>Quek Zhi Hao, Ng Wei Khim, Chan Aik Hui, Oh Choo Hiap</i>	
CLOSING UP ONTO OUR SUN: SOLAR IMAGING	199
<i>Shrivastava Kushagra, Chia Keith Wen Kai, Wong Kang Jun, Liang Tan Alfred Yong, Ning Hwee Tiang</i>	
SEARCH FOR STELLAR STREAMS IN THE GALACTIC HALO FROM GAIA DR2, GALAH DR2, RAVE DR5 AND LAMOST DR4 DATA	209
<i>Made Kartika Wijayanti Ni, Ikkal Arifyanto Mochamad, Annisa Nur</i>	
Author Index	