

ASTRONOMICAL INSTITUTE
SLOVAK ACADEMY OF SCIENCES

CONTRIBUTIONS
OF THE ASTRONOMICAL OBSERVATORY
SKALNATÉ PLESO

• VOLUME LII •

Number 2



September 2022

Editorial Board

Editor-in-Chief

Augustín Skopal, *Tatranská Lomnica, The Slovak Republic*

Managing Editor

Richard Komžík, *Tatranská Lomnica, The Slovak Republic*

Editors

Drahomír Chochol, *Tatranská Lomnica, The Slovak Republic*
Július Koza, *Tatranská Lomnica, The Slovak Republic*
Aleš Kučera, *Tatranská Lomnica, The Slovak Republic*
Luboš Neslušan, *Tatranská Lomnica, The Slovak Republic*
Vladimír Porubčan, *Bratislava, The Slovak Republic*
Theodor Pribulla, *Tatranská Lomnica, The Slovak Republic*

Advisory Board

Bernhard Fleck, *Greenbelt, USA*
Arnold Hanslmeier, *Graz, Austria*
Marian Karlický, *Ondřejov, The Czech Republic*
Tanya Ryabchikova, *Moscow, Russia*
Giovanni B. Valsecchi, *Rome, Italy*
Jan Vondrák, *Prague, The Czech Republic*

©

Astronomical Institute of the Slovak Academy of Sciences
2022

ISSN: 1336-0337 (on-line version)

CODEN: CAOPF8

Editorial Office: Astronomical Institute of the Slovak Academy of Sciences
SK - 059 60 Tatranská Lomnica, The Slovak Republic

CONTENTS

STARS

D. Zengin Çamurdan, B. Özkardeş: Detection of a cyclic period change in the contact binary TU UMi	5
M. Vavrukha, D. Dzikovskyi, S. Smerechynskyi: Inverse problem of white dwarfs theory with rapid axial rotation	25
X.F. Zhao: The interaction between hyperons and the surface gravitational redshift of proto neutron star PSR J0740+6620	58

SOLAR SYSTEM

A.S. Kravtsova, S.I. Barabanov, I.M. Volkov: Photometric observa- tions of six Mars-crossing asteroids with the 1-m INASAN telescope at Mt. Koshka	44
--------------------------------------------------------------------------------------------------------------------------------------------------------------------	----

The Contributions of the Astronomical Observatory Skalnaté Pleso
are available in a full version
in the frame of ADS Abstract Service
and can be downloaded in a usual way from the URL address:

<https://ui.adsabs.harvard.edu/>

as well as from the web-site of
the Astronomical Institute of the Slovak Academy of Sciences
on the URL address:

<https://www.astro.sk/caosp/caosp.php>

The journal is covered/indexed by:

Thomson Reuters services (ISI)
Science Citation Index Expanded (also known as SciSearch[®])
Journal Citation Reports/Science Edition

SCOPUS