Extrasolar Planet's Catalogue produced by Kyoto University

Symposium on Space Weather and Habitable Zones – June 27th & 28th Kyoto

Stellar activities including stellar superflares may have severe impacts on associated planetary systems. Likewise, solar activity has a strong influence on terrestrial activities. In addition to the traditional habitable zones based on the normal radiation flux from the host star, new habitable zone definitions should incorporate stellar flare activities, which may disturb planets located in the habitable zone through high energy particles.

An integrated database of confirmed exoplanets has been developed and launched as "ExoKyoto," for the purpose of better comprehension of exoplanetary systems in different star systems. Each hoststar can be referred to in the catalogue with its habitable zone calculated, based on the observed/estimated star parameters. Stellar flare and its impacts on planetary systems are to be included in ExoKyoto and launched reflecting current available knowledge and information.

This symposium aims to identify state-of-art research outcomes on these topics.

Venue:

Kyoto University Higashi-Ichijo-Kan 2F Room 208 Yoshida-nakaadachicho 1, Sakyo-ku, Kyoto, 606-8306, Japan https://www.gsais.kyoto-u.ac.jp/access

Program Schedule:

June 27th (Tuesday)

[Morning] 10:00-11:30 Vladimir S. Airapetian (NASA GSFC) "Space weather affected habitable zones"

[Afternoon] 13:30-14:00 Hiroyuki Maehara (NAOJ) "Superflares found from Kepler data"

14:00-14:30 Yuta Notsu (Kyoto University) "Spectroscopic observations of superflare stars"

14:30-15:00 Daisaku Nogami (Kyoto University) "Future studies of superflares with Kyoto University Okayama new 3.8m telescope"

15:00-17:00 Discussion June 28th (Wednesday)

[Morning] 10:00-10:30 Kazunari Shibata (Kyoto University) "Superflare CMEs and their potential impacts on planets"

10:30-11:00 Kai Ikuta (Kyoto University) "Bayesian modeling of Kepler light curves of superflare stars"

11:00-11:30 Kosuke Namekata (Kyoto University) "Solar and stellar white light flares"

[Afternoon] 13:00-14:00 Yosuke Yamashiki (Kyoto University) "Development of Exokyoto and its application into flare star"

14:00-14:30 Hiroaki Isobe (Kyoto University) "Evidence of superflares on the past Sun"

14:30-15:00 Takanori Sasaki (Kyoto University) "Development of Habitable Planet<u>ary system"</u>

15:00-17:00 V. S. Airapetian and All "Planetary science and overall Discussion"



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