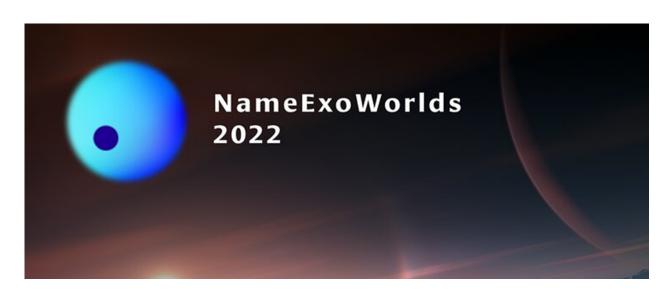


## 國際天文聯會香港天文推廣辦公室

## 新聞稿 (即時發佈)

國際天文聯會舉辦2022年系外行星全球命名比賽

**梁淦章** 國際天文聯會香港天文推廣聯絡員



國際天文聯會(IAU)為慶祝天文推廣辦公室(OAO)成立十週年,於8月在韓國釜山舉行的第三十一屆國際天文聯會大會的新聞發佈會上宣佈,將韋伯太空望遠鏡要跟進觀測的二十顆系外行星系統用作新一輪的全球命名比賽,名為 NameExoWorlds 2022。比賽目的期望把專業天文學家和廣大公眾聚在一起,組隊命名二十顆特定的系外行星及其宿主恆星。

透過 " 系外行星命名 " 倡議, 國際天文聯會及其合作夥伴意識到星空與我們多樣各異文化之間的聯繫至為重要。NameExoWorlds 2022 比賽邀請全球社區將他們自己獨有的文化與這些遙遠的系外世界聯繫起來。每一參賽團隊都可以從已確認的天體列表(在本次命名比賽中統稱為 ExoWorlds) 中為一顆系外行星及其宿主恆星提議一個名稱。

長久以來, 世界各地的文化都以母語為自然界萬物命名, 彼此建立聯繫。許多文明都圍繞著星空中的光點各自發展自己的故事、神話和文化背景。藉著這些聯繫, 我們能夠在群星中找到了自處所在。這是天文學如何成為人類其中最早的學科之一, 也是人類開始探索我們周圍宇宙的永恆追求。

國際天文聯會在1919年成立時,專業天文學家肩負的任務之一是對天體進行彙編星表,並設定一致的命名約規。隨著科學和技術的進步我們能夠探測到一種新的天體,稱為系外行星。這些行星圍繞其他恆星運行。自從三十年前發現了第一顆系外行星,至今已經發現超過五千顆。這些行星大多數僅以它的學名命名,與我們的文化和故事沒有任何關連。

2015年首屆的 NameExoWorlds命名比賽命名了十九個系外行星世界 ExoWorlds(十四顆恆星和三十一顆圍繞它們運行的系外行星),獲得了來自一百八十二個國家和地區的超過五十萬張選票,反映國際對天文學的真實興趣。2019年 NameExoWorlds 命名活動作為國際天文聯會百年慶典活動之一,向每個國家/地區分配一個系外行星系統,再由他們為所屬的系外行星和宿主恆星命名。為這次活動,一百一十二個國家/地區組織了全國性的運動,得到全球超過七十八萬人直接參與,包括由香港人命名的獅子山(宿主恆星)和太平山(系外行星)。

今屆NameExoWorlds 2022 命名的20個系外行星系統特別有趣,因為它們是韋伯太空望遠鏡首批系外行星觀測目標之一。命名提議以隊制形式直接提交給IAU。參賽隊伍由兩人或以上的學生、教師、天文愛好者或專業天文學家組成。除了命名提議外,亦須舉辦與系外行星相關的外展活動。

國際天文聯會香港天文推廣辦公室為了更有效在港推動2022年系外行星全球命名比賽, 聯繫了下列本港天文機構和會社成立工作組, 整理參賽指引, 舉辦發佈講座供全港市民參考, 提供相關協助, 並籌組本地評審團篩選出代表香港的命名提議呈交IAU作最終全球評選。

### 2022年系外行星全球命名比賽香港工作組

- 國際天文聯會香港天文推廣辦公室
- 香港太空館
- 嗇色園主辦可觀自然教育中心暨天文館
- 坐井會
- 香港觀天會
- 星匯點
- 香港天文學會

#### 2022年系外行星全球命名比賽——發佈講座

日期: 2022年9月25日(星期日)

時間: 下午 3:00-4:00 地點: 香港太空館演講廳

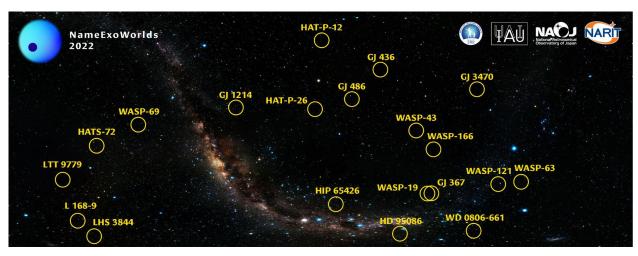
內容: 介紹命名比賽詳情, 參賽辦法, 命名規則和20個系外行星系統的相關資料等

形式: 實體和線上講座同步進行

參加辦法及詳情請留意網站 www.iaunochk.org 及日後公佈的活動消息。

查詢:info@iaunochk.org

國際天文聯會 (International Astronomical Union, 縮寫為IAU), 於1919年7月28日在比利時的布魯塞爾成立。現時共有來自108個國家/地區共12461位會員。IAU的宗旨是透過國際合作推動天文學在各領域的發展, 這包括研究、推廣、教育及開發等。IAU是國際認可的機構, 負責統合恆星、小行星、彗星等新天體以及天文學名詞的的定義與英文命名。



2022年系外行星全球命名比賽20顆指定的系外行星系統在星空的分佈圖



畫家筆下一顆類地系外行星岩質表面所見的景緻



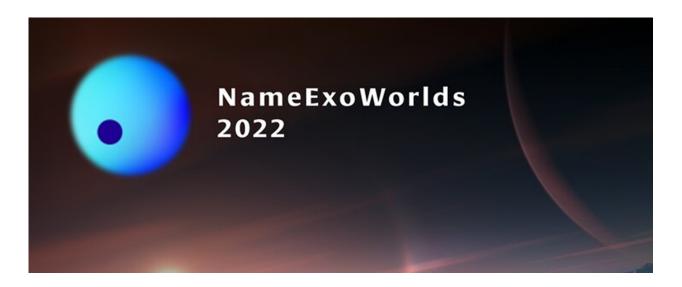
## **IAU National Outreach Coordinator of Hong Kong China**

## **PRESS RELEASE (for immediate release)**

# 2022 Global naming competition of ExoWorlds organized by the International Astronomical Union

Kam Cheung LEUNG

IAU National Outreach Coordinator of Hong Kong



To celebrate the 10th anniversary of its Office for Astronomy Outreach (OAO), the International Astronomical Union (IAU) is launching a contest to name 20 exoplanetary systems to be observed by the James Webb Space Telescope (JWST). The competition, NameExoWorlds 2022, was announced at a press conference at the XXXI IAU General Assembly, held in Busan, South Korea in August this year. The contest seeks to bring together both professional astronomers and the wider public, giving them the opportunity to name the 20 selected exoplanets along with their host stars.

Through the NameExoWorlds initiatives, the IAU and its partners recognise the importance of the connections between the sky and our diverse cultures. The <a href="NameExoWorlds 2022">NameExoWorlds 2022</a> contest invites communities across the globe to connect their own cultures to these distant worlds. Each team can propose a name for an exoplanet and its host star from a list of confirmed objects (collectively referred to as "ExoWorlds" in this competition).

Cultures around the world have long made connections with objects in the natural world by giving them names in their native tongues. Many civilisations have developed their own stories, mythologies, and cultural contexts around specks of light in the heavens above. Through these connections we eventually found our place among the stars. This is the story of how astronomy came to be among the earliest of the disciplines we now call science, and the beginning of humanity's eternal quest to understand the Universe around us.

When the IAU was established in 1919, one of the tasks delegated to the professional astronomers was to catalogue celestial objects and provide consistent conventions for naming them. Advances in science and technology have recently enabled us to detect a new category of celestial object, called exoplanets — planets orbiting other stars. The first exoplanets were discovered just three decades ago and over 5000 have been identified since. Most of these planets are only referred to by their scientific designations and have no connections to our stories and cultures.

Reflecting the truly international interest in astronomy, the first NameExoWorlds competition, in 2015, named 19 ExoWorlds (14 stars and 31 exoplanets orbiting them), with over half a million votes from 182 countries and territories. In 2019, as part of the IAU's centennial celebrations, the 2019 NameExoWorlds competition offered every country and territory, the chance to name one planetary system, comprising an exoplanet and its host star. As part of this contest, 112 countries and territories organised national campaigns that involved the direct participation of over 780 000 people worldwide, including Hong Kong's naming of its assigned exoplanet Victoriapeak and the host star Lionrock.

The systems to be named by NameExoWorlds 2022 are of special interest, as they are among the first exoplanet targets of the <u>JWST</u>. Naming proposals are to be made by teams and submitted to the IAU direct. Anyone, including students and teachers, astronomy enthusiasts, amateur astronomers and exoplanetary scientists, may form a team and propose names for 20 exoplanetary systems, each of which consists of one known exoplanet and its host star. Apart from the naming proposal, teams are required to organize outreach activities in relation to ExoWorlds.

In order to more effectively promote the NameExoWorlds 2022 competition in Hong Kong, the IAU Hong Kong Outreach Coordinator has liaised with the following local astronomical organizations and formed a working committee to promote the global competition, including compilation of competition guidelines, organization of public lectures, provision of assistance, and the formation of a selection panel to select a proposal to represent Hong Kong to be submitted to the IAU for final global selection.

## The NameExoWorlds 2022 Hong Kong Working Committee comprises:

- The IAU Hong Kong Outreach Coordinator
- Hong Kong Space Museum
- Ho Koon Nature Education cum Astronomical Centre (Sponsored by Sik Sik Yuen)
- Sky Observers' Association (Hong Kong)
- · Space Observers H.K.
- Starrix
- Hong Kong Astronomical Society

## The NameExoWorlds 2022 Global Naming Competition – Announcement

Date: 25 September 2022 (Sunday)

Time: 3 - 4pm

Venue: Hong Kong Space Museum Lecture Hall

Content: Details of the competition, naming and submission of proposals, and

the 20 exoplanetary systems selected for the global naming competition

Format: Public and simultaneous on-line lecture

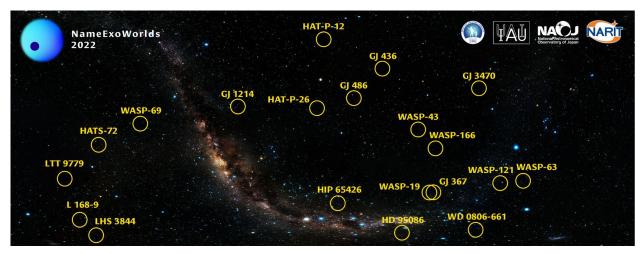
Details of the competition and associated announcements are available at

www.iaunochk.org;

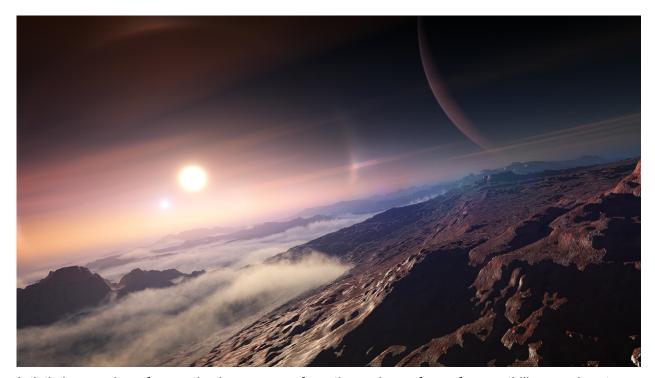
Enquiries: info@iaunochk.org

#### More information

The IAU is the international astronomical organisation that brings together more than 12 000 active professional astronomers from more than 100 countries worldwide. Its mission is to promote and safeguard astronomy in all its aspects, including research, communication, education and development, through international cooperation. The IAU also serves as the internationally recognised authority for assigning designations to celestial bodies and the surface features on them. Founded in 1919, the IAU is the world's largest professional body for astronomers.



The distribution in the night sky of the 20 confirmed exoplanetary systems earmarked for the NameExoWorlds 2022 global naming competition



Artist's impression of a scenic view as seen from the rocky surface of an earthlike exoplanet