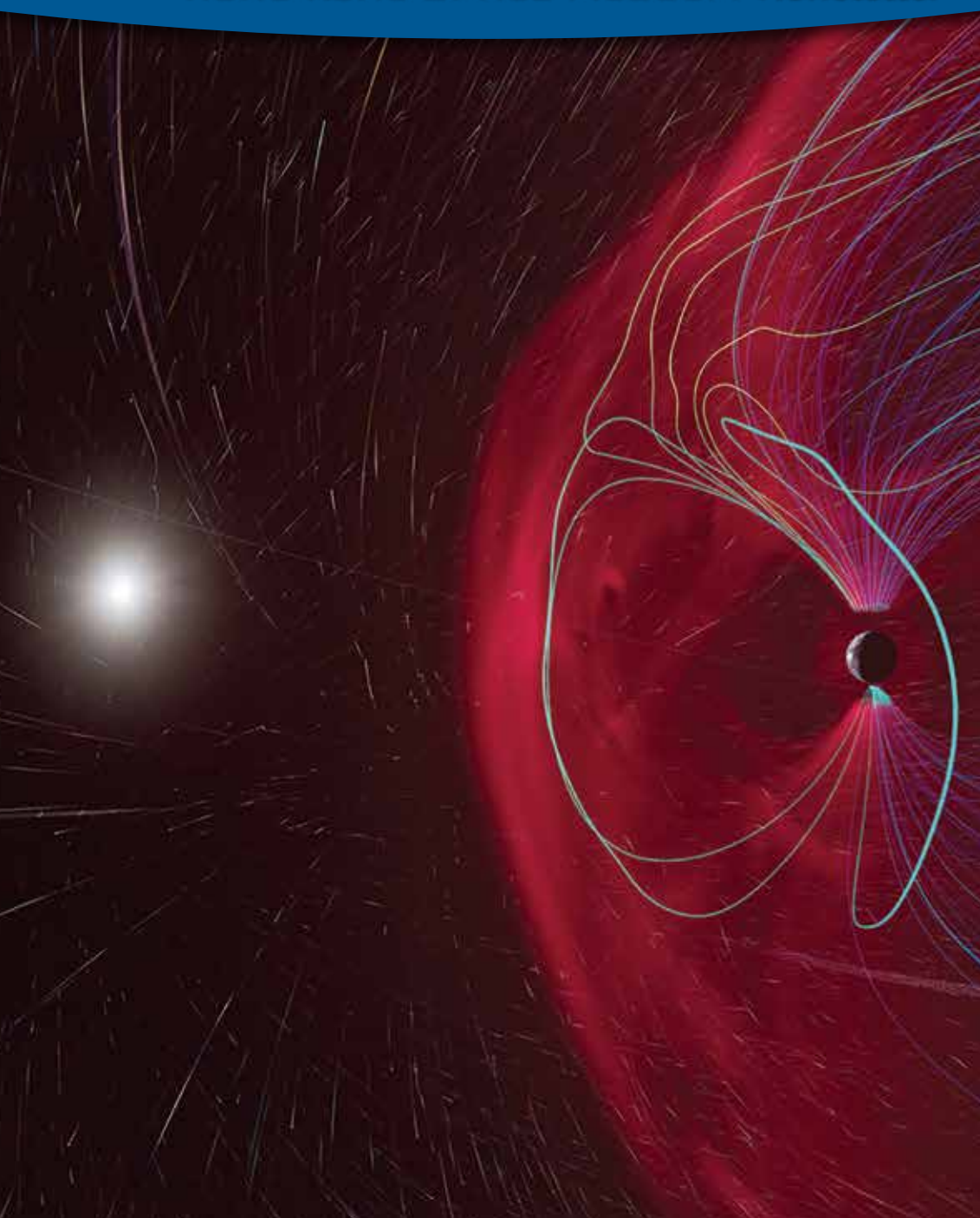


香港太空館 7-9.2021 通訊

HONG KONG SPACE MUSEUM Newsletter





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香港太空館編製

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封面 Front Cover: 天象節目《天外有天》 Sky Show "Worlds Beyond Earth"

封面裏 Inside Front Cover: 立體球幕電影《穹蒼解密 3D》 3D Dome Show "Secrets of the Universe 3D"

封底 Back Cover: 全天域電影《古洞透天機》 OMNIMAX Show "Ancient Caves"

節目和票價如有更改，恕不另行通知。

All programmes and prices are subject to change without prior notice.

露力得
Enggie Pup



露文達
Aniti Kitty



2021 天文現象

每年都有為數不少的天文現象，香港太空館在大堂設置專題展覽，介紹 2021 年五個比較特別的天象，並提供實用的觀賞指南，讓大家掌握最理想的觀賞日期、時間、地點和所需用具。

五個精選的特別天象分別為：5 月 26 日及 11 月 19 日的「月食」、8 月中旬的「英仙座流星雨」、12 月中旬的「雙子座流星雨」和 8 月 15 日至 16 日的「連續木衛現象」。

地點：香港太空館大堂

展覽日期：展期延長至 2021 年 12 月 27 日

免費參觀

網上展覽同步進行，請瀏覽香港太空館網頁。

2021 Astronomical Events

There are plenty of astronomical events every year. The Hong Kong Space Museum stages a special exhibition at the foyer to introduce five spectacular events in 2021. The exhibition will offer observing tips on how to pick the best dates, times, locations and tools for observation.

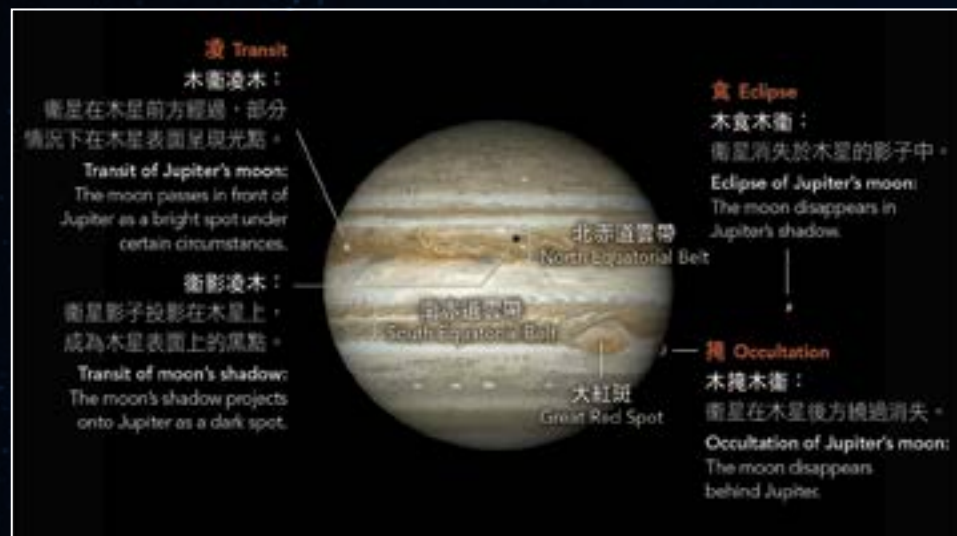
The five spectacular events are: "lunar eclipses" on 26 May and 19 November, "Perseid meteor shower" in mid-August, "Geminid meteor shower" in mid-December and "serial phenomena of Jupiter's moons" on 15 – 16 August.

Venue: Foyer, Hong Kong Space Museum

Exhibition period: extended till 27 December 2021

Free admission

Please visit the website of the Hong Kong Space Museum for the online exhibition.



Created with WinJUPOS (<http://www.grischa-hahn.homepage.t-online.de>)

「連續木衛現象」：8 月 15 至 16 日，木星四顆伽利略衛星會在數小時內連續發生「凌」、「食」和「掩」現象，而部分衛星之間更出現罕見的「互掩」和「互食」現象。

"Serial phenomena of Jupiter's moons": A series of transits, eclipses and occultations of the four Galilean moons will happen within a few hours on 15-16 August. Rare mutual occultations and mutual eclipses among the moons will also occur.

互相掩食現象 Mutual Events



木衛互掩：

衛星部分或完全遮掩另一衛星。

Mutual occultation:

A moon completely or partially blocks another moon.

木衛互食：

衛星部分或完全進入另一衛星的影子。

Mutual eclipse:

A moon completely or partially immerses in the shadow of another moon.

其他特別現象 Other Special Phenomena



衛掩衛影：

衛星部分或完全遮掩衛星的影子。

Occultation of moon's shadow:

A moon completely or partially blocks another moon's shadow.

衛影重疊：

衛星的影子相遇。

Shadows overlap:

Shadows of the moons meet and overlap.

Created with WinJUPOS (<http://www.grischa-hahn.homepage.t-online.de>)



木衛現象模擬片段 Events simulation video:

<https://youtu.be/B3A3kblkZh8>

「宇宙大爆炸」

展示宇宙由大爆炸至現在的演化。

"The Big Bang" reveals the evolution of the Universe from its genesis to the present day.



常設展覽

香港太空館設有兩個展覽廳，分別為地下的「宇宙展覽廳」和一樓的「太空探索展覽廳」，合共面積 1,600 平方米，當中設置約一百件展品，其中約有七成屬互動展品。展覽透過有趣的互動展品，配合燈光效果和環境布置，介紹天文及太空科技新知。

「宇宙展覽廳」展示探索宇宙由近至遠的概念，從我們身處的太陽系開始，推展至遙遠的恆星及星系，探索宇宙的演化。「太空探索展覽廳」主題則環繞太空探索和太空科技的發展。

Permanent Exhibition

The Hong Kong Space Museum houses two exhibition halls, namely the "Hall of the Cosmos" on the ground floor and the "Hall of Space Exploration" on the first floor. Covering a total area of 1,600 square metres, the exhibition halls feature around a hundred exhibits of which about 70 per cent are of interactive design. With the aid of interesting hands-on exhibits coupled with vivid lighting effects and environmental decorations, the exhibition introduces astronomy and space science in an engaging way.

The "Hall of the Cosmos" showcases the Universe from near to far, travelling from the Solar System we live in, to the distant stars and galaxies, exploring the evolution of the Universe along the way. The "Hall of Space Exploration" depicts the exciting development of space exploration and space technology.

人類在太空 Man in Space

中國的文明可追溯至8,000年前，但在60年間，人類就已經派出太空船到訪太陽系每顆行星，懂得在太空中生活，並正計劃在火星上建立基地。下世紀又將會發展到什麼地步呢？

Chinese civilization dates back 8,000 years, but in only 60 years man has sent spacecraft to every planet in the Solar System, learnt to live in space and is now planning to set up bases on Mars – what will happen in the next century!



「人類在太空」

介紹人類勇闖太空的歷史。

"Man in Space" showcases the history of human space exploration.

「宇宙展覽廳」展品推介： 太陽望遠鏡

太陽是萬物之源，亦是最接近地球的恆星。由於太陽的表面會隨着太陽的自轉和磁場不斷變化，觀測太陽能讓科學家更了解恆星的結構和演化。專門用作觀測太陽的望遠鏡稱為「太陽望遠鏡」，一般具備減光和追蹤兩大功能，部分更配備特殊濾鏡，利用特定波段進行觀測，呈現太陽的某些特徵。

太空館的第一代太陽望遠鏡於 1981 年完成安裝，主要用於觀測太陽黑子，以光學方式將影像投射到展廳內。現時的太陽望遠鏡系統在 2017 年添置，是一種「定日鏡」，即望遠鏡保持指向太陽。系統配備了三支專用作觀測太陽的望遠鏡，每支均裝有特製濾鏡，分別以白光、氫 α 譜線（波長為 656.3 nm）和鈣-K 譜線（波長為 393.3 nm）三個不同波段，每日持續觀測太陽。

太陽望遠鏡系統配有連接至數據庫的設備，不單能將影像實時傳送到展廳的「太陽望遠鏡」展品，還可在網上發布太陽影像。當遇上日食或其他與太陽相關的天文現象時，這種直播方法就可大派用場。香港最近兩次於 2019 年 12 月 26 日及 2020 年 6 月 21 日出現的日偏食，就是透過這種方式讓市民在不同的網上平台欣賞，而 2020 年 6 月的日偏食網上直播，更累計吸引了超過 280,000 人次觀看！



觀眾於「宇宙展覽廳」駐足觀賞日偏食的太陽影像。

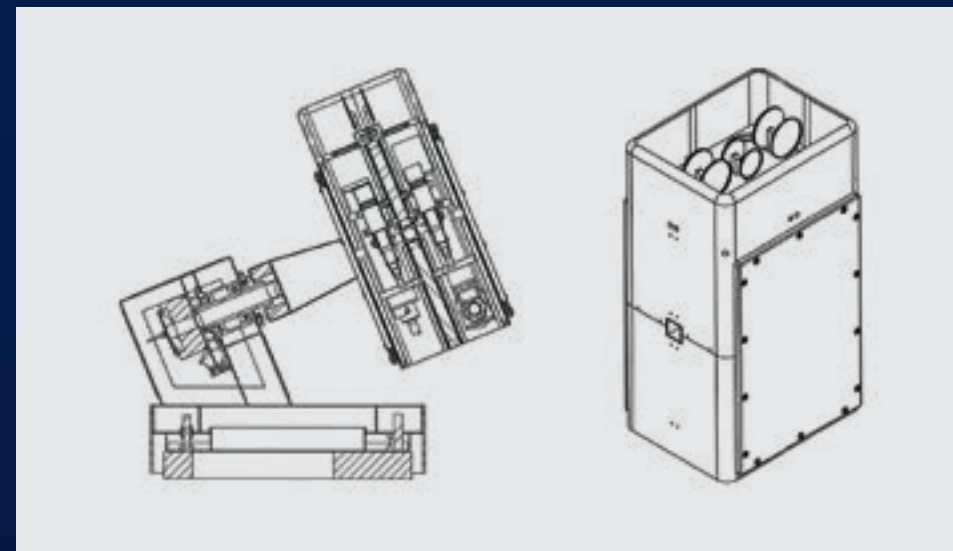
Visitors at the "Hall of the Cosmos" were looking at an image of the Sun during a partial solar eclipse.

"Hall of the Cosmos" highlight exhibit: Solar Telescope

The Sun is the source of life and it is also the nearest star to the Earth. The solar surface changes incessantly with the Sun's rotation and magnetic fields. Through observing the Sun, scientists gain a better understanding of stellar structure and evolution. Telescopes specially used for observing the Sun are called "solar telescopes". They are in general capable of reducing the intensity of sunlight and tracking the Sun. Some are equipped with special filters that allow specific wavelengths to pass through so as to reveal interesting features of the Sun.

Installation of the first-generation solar telescope of the Hong Kong Space Museum was completed in 1981. It was mainly used for observing sunspots. Images were projected optically to the exhibition hall. The current solar telescope system was acquired in 2017. It is a kind of "heliostat" with the telescope always pointing at the Sun. The system consists of three solar telescopes equipped with specially-made filters that use white light, Hydrogen-Alpha (with a wavelength of 656.3 nm) and Calcium K (with a wavelength of 393.3 nm) passbands to observe the Sun continuously.

The solar telescope system is connected to the database. Not only can it send real-time images to the "Solar Telescope" exhibit in the exhibition hall, it can also broadcast these images online. This is particularly useful when a solar eclipse or an astronomical event related to the Sun occurs. It was in this way that the public enjoyed the partial solar eclipses on 26 December 2019 and 21 June 2020. The livecast of the partial solar eclipse in June 2020 attracted more than 280,000 views!



太陽望遠鏡系統設計圖，揭示內部的六支望遠鏡：三支專用於觀測太陽，一支用於觀察行星及月球，其餘兩支用於自動導星。

The design drawing of the solar telescope system reveals the six telescopes inside: three dedicated to observing the Sun, one for observing the planets and the Moon, and the remaining two are used for autoguiding.



安裝於香港太空館天台的太陽望遠鏡系統。

The solar telescope system installed on the rooftop of the Hong Kong Space Museum.



太陽望遠鏡系統由多支望遠鏡組成，以不同波段觀測和追蹤太陽。

The solar telescope system comprises multiple telescopes for tracking the Sun and observing it in different passbands.



白光太陽影像，呈現太陽在可見光下光球層的特徵。例如圖中中下方的黑子群。

The white light solar image reveals the characteristics of the Sun's photosphere in visible light. Groups of sunspot are visible at the lower centre of the image.



鈣-K 太陽影像，顯示與太陽磁場有關的特徵，例如圖中右上方出現的耀斑。

This Calcium K solar image shows features related to the solar magnetic fields, such as the solar flare in the upper right hand corner.



氫 α 太陽影像，記錄氫原子發出的光，揭示太陽色球層的特徵，例如圖中右上方出現的日珥，是噴射出來的氣體。

This Hydrogen-alpha solar image recorded the light emitted by hydrogen atoms, thereby revealing the characteristics of the Sun's chromosphere. For instance, the solar prominence in the upper right hand corner was in fact a gas ejection.



2019年12月26日由太陽望遠鏡系統拍攝的日偏食。

The partial solar eclipse captured by the solar telescope system on 26 December 2019.

2020年6月21日，市民透過由太陽望遠鏡系統轉播的實時畫面觀賞日偏食。

On 21 June 2020, the public watched the partial solar eclipse through real-time images broadcast by the solar telescope system.



2020年6月21日日偏食的縮時錄像。
Time-lapse video of the partial solar eclipse on 21 June 2020.

展覽廳活動 — 旋轉星雲

Exhibition Hall Activity — Nebula Spin Art

(粵語講解 To be conducted in Cantonese)

你曾否對宇宙那些絢麗燦爛的星雲感到好奇呢？我們不時看到美得令人難以置信的星雲圖像，然而你們了解它們嗎？此活動將簡單介紹著名的星雲，參與者可以嘗試用壓克力顏料和旋轉器來創作出屬於自己的星雲。

日期：2021年7月12日、7月26日、8月2日及8月16日（星期一）

活動時間：活動需時約10分鐘，於以下時段進行：

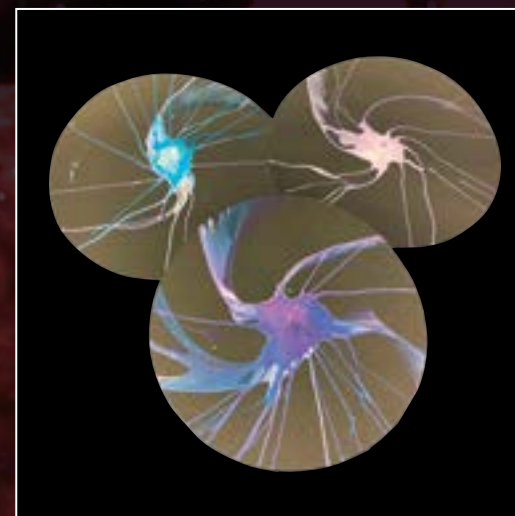
第一節 3:00 - 4:00 pm

第二節 4:30 - 5:30 pm

活動地點：太空館地下「宇宙展覽廳」

名額：每節12組參加者，每組最多2人

參加辦法及費用：免費。每節活動開始前30分鐘於活動地點報名參加，名額先到先得。



穹蒼解密 3D

立體球幕電影《穹蒼解密 3D》帶你沉浸在一個由傑出科學家所嚮導的旅程，一同尋找我們這個時代最大謎團的答案——宇宙是如何起源並演化到現在的模樣？

我們的科學之旅由造訪大型強子對撞機開始，它是人類有史以來建造過最大型的機器，亦是迄今最強勁的科學儀器。我們可以一睹這台機器的內裏乾坤，從而明白到無分種族疆界的研究隊伍羣策羣力，一起去破解宇宙中最大的謎題，才是科學研究的真諦。

旅程並未就此結束。接着我們會參觀激光干涉儀重力波觀測站。這個令人驚嘆的研究裝置，近年印證了愛因斯坦於一個世紀前提出，有關重力波存在的預言。在旅程當中，我們還會回顧歷史上出現過的科學巨人，為我們了解人類認識宇宙的過程及發展所需的儀器，提供歷史脈絡。這些具標誌性的人物及現代的翹楚都啟發我們走得更遠。

人類正處身前無古人的科學發現的前沿，而我們每一位都可以參與其中。

映期 Showing Period 1.7.2021 – 31.3.2022

地點 Venue 天象廳 Space Theatre

入場費 Admission Fees \$24 前座 Front stalls, \$32 後座 stalls (標準票 Standard)
\$12 前座 Front stalls, \$16 後座 stalls (優惠票 Concession)
優惠票適用於全日制學生、殘疾人士 (及一名同行照料者) 及 60 歲或以上高齡人士。

Concession is applicable to full-time students, people with disabilities (and one accompanying carer) and senior citizens aged 60 or above.

片長 Duration 42 分鐘 Minutes

放映時間 Show Schedule 請參閱第 49 頁的節目時間表 Please refer to Show Schedule on page 49

Secrets of the Universe 3D

The 3D Dome Show "Secrets of the Universe 3D" immerses you in a journey guided by some of the most brilliant minds to seek the answer to the greatest mysteries of our time – how did the Universe originate and evolve into its present state?

Our science adventure begins as we travel to visit the Large Hadron Collider (LHC), the biggest machine ever built and the most powerful scientific instrument ever created. We get an inside look at the machine and come to understand just what it means to do science, teaming up for the flag of humanity to solve the Universe's greatest mysteries.

The journey does not end here. We then visit the Laser Interferometer Gravitational-Wave Observatory (LIGO), the amazing research facility that recently confirmed Einstein's century-old prediction of the existence of gravitational waves. All along the way, we flash back to history's giants of science, providing context to humanity's path to understanding and the instruments developed to help us see more clearly than we ever could before. These icons, along with their modern-day counterparts, inspire each of us to reach further.

Humanity is at the edge of unprecedented scientific discovery. And we can all be a part of it.



天外有天

地球是我們的家，更是目前為止我們在宇宙中唯一的棲身之所。地球毋庸置疑是特別及生機盎然的；太陽系中其他成員的面貌又是怎樣的呢？

太陽系由太陽和一切受其重力束縛的天體組成，其中包括行星、矮行星、數以百計的衛星和無數的小行星、彗星及其他冰封天體。這節目利用了不同太空探測任務所蒐集的真實數據製作而成，帶領我們遨遊太陽系，把近鄰們的最新發現盡收眼底。

我們會跟隨着太陽神任務的登月艙「鷹號」，遊覽滿佈環形山的月球表面。其他探測器則會帶我們穿越盤繞土星的光環，或俯瞰其他遙遠星球上的活躍火山和深埋地下的海洋。

天象節目《天外有天》透過激動人心的太陽系演化模擬場景，以至令人有如置身外太空的視覺效果，把這些充滿活力、千變萬化的世界的故事娓娓道來。地球是目前已知唯一能夠孕育出生命的星球，我們對這顆得天獨厚的行星當有更深的體會。齊來啟程往太空去吧！

映期 Showing Period 1.7.2021 – 31.12.2021

地點 Venue 天象廳 Space Theatre

入場費 Admission Fees \$24 前座 Front stalls, \$32 後座 stalls (標準票 Standard)
\$12 前座 Front stalls, \$16 後座 stalls (優惠票 Concession)
優惠票適用於全日制學生、殘疾人士 (及一名同行照料者) 及 60 歲或以上高齡人士。

Concession is applicable to full-time students, people with disabilities (and one accompanying carer) and senior citizens aged 60 or above.

片長 Duration 25 分鐘 Minutes

放映時間 Show Schedule 請參閱第 49 頁的節目時間表 Please refer to Show Schedule on page 49

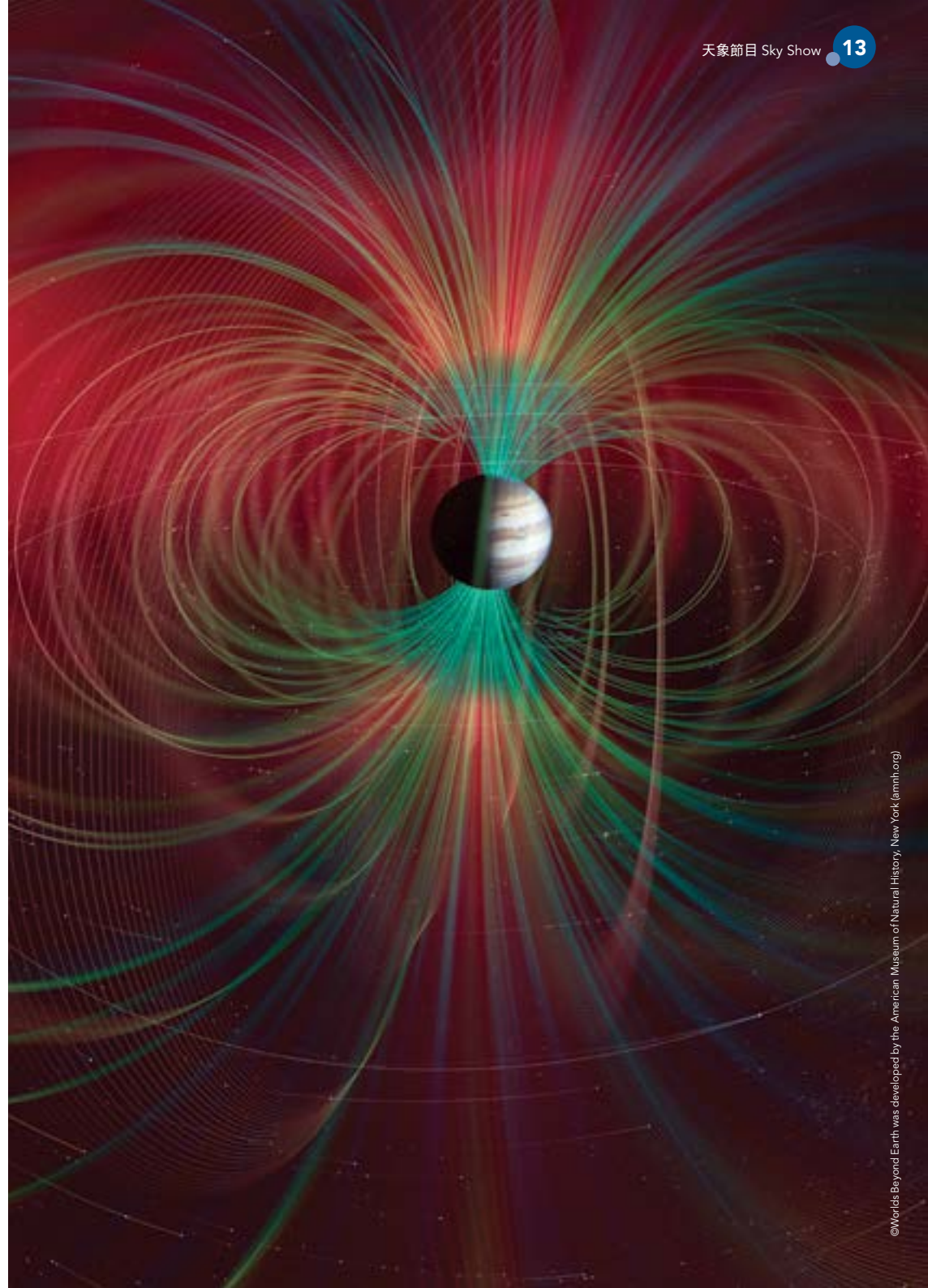
Worlds Beyond Earth

Earth is our home, and indeed our only home in the Universe at present. Earth is undoubtedly special and vibrant, but what kind of worlds are the other members of the Solar System like?

The Solar System consists of the Sun and everything bound to it by gravity, including the planets, dwarf planets, hundreds of satellites and countless of asteroids, comets and other icy bodies. Based on authentic scientific data collected from various groundbreaking space missions, the show leads us to a tour across the Solar System to marvel at the latest discoveries from our cosmic neighbours.

Following an Apollo mission with the Lunar Module "Falcon", we visit the cratered surface of our own Moon. Other spacecrafts bring us to a dramatic flight through the swirling rings of Saturn, and soaring encounters with distant worlds of active volcanoes and buried oceans.

From breathtaking scenes depicting the evolution of our Solar System to immersive visualisations of deeper space, the Sky Show "Worlds Beyond Earth" tells the story of the surprisingly dynamic nature of the worlds that share our Solar System, and makes us appreciate the uniqueness of our home planet for life to flourish here but not in other places. Come and join this exciting voyage to space!



古洞透天機

科學就是為了找到答案。為了得到這些答案，你願意走得有多遠呢？

近數十年來圍繞地球氣候變化的話題，特別是關於全球暖化的問題，鬧得沸沸揚揚。我們可以在哪裏找到氣候變化的證據？我們又如何證明人類正在經歷全球暖化呢？一位有遠見的科學家為了研究地球氣候而踏上史詩般的征途。

你會參與由古氣候學家吉娜·莫絲麗博士和她的資深洞穴探險隊所帶領的冒險旅程，在最意想不到的地方——洞穴——去解開地球氣候的秘密。洞穴藏有大量的氣候信息，可能是追蹤氣候變化如何影響人類文明的關鍵。全天候電影《古洞透天機》分別於法國、冰島、巴哈馬群島、美國和墨西哥的尤卡坦半島取景，探險隊到訪一些地球上最偏遠的洞穴，不論是水面上還是水底下均可令你恍如置身其中。我們將一同走到渺無人跡的地方，收集歷經千年歲月的石筍樣本，它們蘊含了見證地球氣候歷史變化的各種元素。

「不入虎穴，焉得虎子。」你準備好了嗎？

Ancient Caves

Science is about finding answers. And how far would you go to get those answers?

Issues on Earth's climate change, particularly those related to global warming, have been a heated topic in recent decades. Where can we find the evidence of climate change? How do we know we are experiencing global warming? One visionary scientist is on an epic quest to understand the Earth's climate.

You are joining the treacherous expedition led by the palaeoclimatologist Dr. Gina Moseley with her team of experienced cave explorers to unlock the secrets of the Earth's climate in the most unexpected places: caves. Caves contain a wealth of climate information and they may hold the keys to how the change in climate has affected human civilisation. Filmed in France, Iceland, the Bahamas, the United States, and Mexico's Yucatan Peninsula, the immersive cinematography of the OMNIMAX Show "Ancient Caves" takes you into some of the world's most remote caves, both above and below the water. Together, we go where very few humans will ever go and strive to collect thousands of years old stalagmite samples which contain elements representing a fingerprint of our planet's climate history.

Are you ready to embark on a challenging but rewarding adventure?

映期 Showing Period 1.7.2021 – 31.3.2022

地點 Venue 天象廳 Space Theatre

入場費 Admission Fees \$24 前座 Front stalls, \$32 後座 stalls (標準票 Standard)
\$12 前座 Front stalls, \$16 後座 stalls (優惠票 Concession)
優惠票適用於全日制學生、殘疾人士 (及一名同行照料者) 及 60 歲或以上高齡人士。

Concession is applicable to full-time students, people with disabilities (and one accompanying carer) and senior citizens aged 60 or above.

片長 Duration 40 分鐘 Minutes

放映時間 Show Schedule 請參閱第 49 頁的節目時間表 Please refer to Show Schedule on page 49



太陽之外

在浩瀚的銀河系裏，到底有多少顆如太陽般明亮熾熱的恆星呢？又有多少顆行星像我們身處的地球般，圍繞着恆星轉動呢？

在學校節目《太陽之外》中，對宇宙充滿好奇的天藍將飛越八大行星，離開太陽系，展開一段認識及尋找系外行星的旅程。系外行星指所有圍繞着太陽以外的恆星運行的行星，在穿梭銀河系的途中，天藍發現各個系外行星的大小、環境和特質都不一樣；有的表面完全被海洋覆蓋，有的質量更是地球的10倍。但或許在未知的宇宙裏，我們終會發現另一顆像地球般孕育着生命及適合人類居住的行星……

讓我們跟隨着天藍的腳步，一起仰望夜空並學習探測系外行星的方法，成為行星獵人，探索新地球。

對象 Target Audience：小四至小六學生 Primary 4 to 6 Student

地點 Venue：天象廳 Space Theatre

片長 Duration：26 分鐘 Minutes

設有粵語、英語及普通話旁述

The show is available in Cantonese, English and Putonghua

Beyond the Sun

Do you know how many stars are as bright and hot as the Sun in the Milky Way? Do you know how many planets revolve around stars like the Earth we are on?

In "Beyond the Sun", Celeste, who is curious about the Universe, flies over the eight planets and beyond the Solar System. She sets sail for a journey of understanding and searching exoplanets. Exoplanets refer to all the planets orbiting stars other than the Sun. On the way through the Milky Way, Celeste discovers that the size, environment and characteristics of different exoplanets are diverse. For example, there are exoplanets with surfaces completely covered by ocean, some exoplanets as massive as 10 times that of Earth. Maybe in the unknown universe, we will, in the end, discover another planet that has life on it like the Earth and which is suitable for humans to live on...

Let's follow Celeste, never stop looking up at the night sky, and learn how to find exoplanets and to become a planet hunter to explore the new earth.

地球誕生記

我們身處的太陽系在大約46億年前，從星際間的一個巨大雲團中誕生。經歷超新星爆炸和猛烈的碰撞，各類的天體，包括我們居住的行星—地球逐漸成形……

學校節目《地球誕生記》以令人歎為觀止的電腦模擬影像帶領我們踏上一段時光之旅，回到太陽系起源的時刻，探索它的誕生和演化過程。另外，我們更會重返地球形成之初，見證它從一個表面滿佈熾熱的火山，飽受太空碎片撞擊的行星，慢慢演變成一個擁有液態水，孕育着無數生命的適居之地。

然而，在浩瀚的宇宙裏，地球是唯一一個承載着生命的星球嗎？生命的出現是源於偶然的機會，還是由一連串天體撞擊和化學反應所造就的奇跡呢？

對象 Target Audience：中學生 Secondary Student

地點 Venue：天象廳 Space Theatre

片長 Duration：24 分鐘 Minutes

設有粵語、英語及普通話旁述

The show is available in Cantonese, English and Putonghua

Birth of Planet Earth

A giant interstellar cloud gave birth to our Solar System about 4.6 billion years ago. Different objects in the system, including our home – the Earth emerged from supernova explosion and violent collisions.

School Show "Birth of Planet Earth" employs advanced and fascinating visualisations to take us back in time to the fiery beginning of our young Solar System, as we explore its birth and evolution along the way. We also turn back the clock to witness the origin of our planet Earth. Our Earth used to harbour many more volcanoes on its surface and was constantly hit by cosmic debris. How could it transform itself into a nurturing ground where liquid water flows freely?

We may come to ponder, is our planet Earth the only life-bearing world in the vast universe? Is the emergence of life on Earth a fluke, or a remarkable convergence of impacts and chemical reactions?



© Render Area



© Spitz Creative Media

傾斜 23.5 度

是誰定下春夏秋冬的規律？為甚麼我們每年總要忍受酷熱難當的夏季，又要捱過寒風凜冽的冬季？也許你跟學校節目《傾斜 23.5 度》中的兩姊妹安妮及麥斯一樣想了解箇中原因。

安妮正在苦惱如何完成學校的專題習作，製作一個地球繞日公轉模型時，房間內突然出現季節變換的景致。此時，麥斯拿着心愛的機械人凱文及玩具火箭，提議一同出發前往太空找尋答案。他們隨即展開一趟非一般的旅程。在太空船內，凱文協助安妮及麥斯從太空觀察地球自轉及公轉的規律，了解地球的自轉軸傾斜如何造成四季及影響到南北半球的日照與溫度變化；凱文亦告訴他們，從天文學的角度如何定義及劃分四季。

讓我們一起在短短 25 分鐘的時間內經歷一年間的四季變換，在半圓屏幕環繞下體驗大自然的奧妙。

對象 Target Audience：小學生 Primary Student

地點 Venue：天象廳 Space Theatre

片長 Duration：25 分鐘 Minutes

設有粵語及英語旁述

The show is available in Cantonese and English

- 只限學校及相關非牟利團體申請。
- 有關放映時間及訂票詳情，請參閱 48 - 49 頁的「購票指南」及「天象廳節目時間表」或致電 2734 2720 查詢（星期一至五上午 9 時至下午 1 時，下午 2 時至 5 時）。

Tilt

Who sets the rules of spring, summer, autumn and winter? Why do we have to endure the sizzling heat in summer and get through the chilly winter every year? Maybe you also want to know the reason, just like the siblings Anni and Max in the school show "Tilt".

Anni is struggling to complete her school project on making a model of Earth's orbital revolution. Suddenly revolving scenes of seasons pop up in her room. Max takes out his beloved robot Kelvin and a toy rocket and suggests they should set out together and find the answer in space. They then embark on an extraordinary journey. In the spacecraft, Kelvin helps Anni and Max understand the science behind through observing the patterns of the Earth's rotation and revolution, and find out how the tilt of the Earth's axis results in the seasons in our world, and affects the sunshine and temperature changes in the northern and southern hemispheres from space. Kelvin also tells Anni and Max the astronomical definition and division of the four seasons.

Let's experience the transit of seasons and the mysteries of nature in just 25 minutes under the encompassing screen of the Space Theatre.

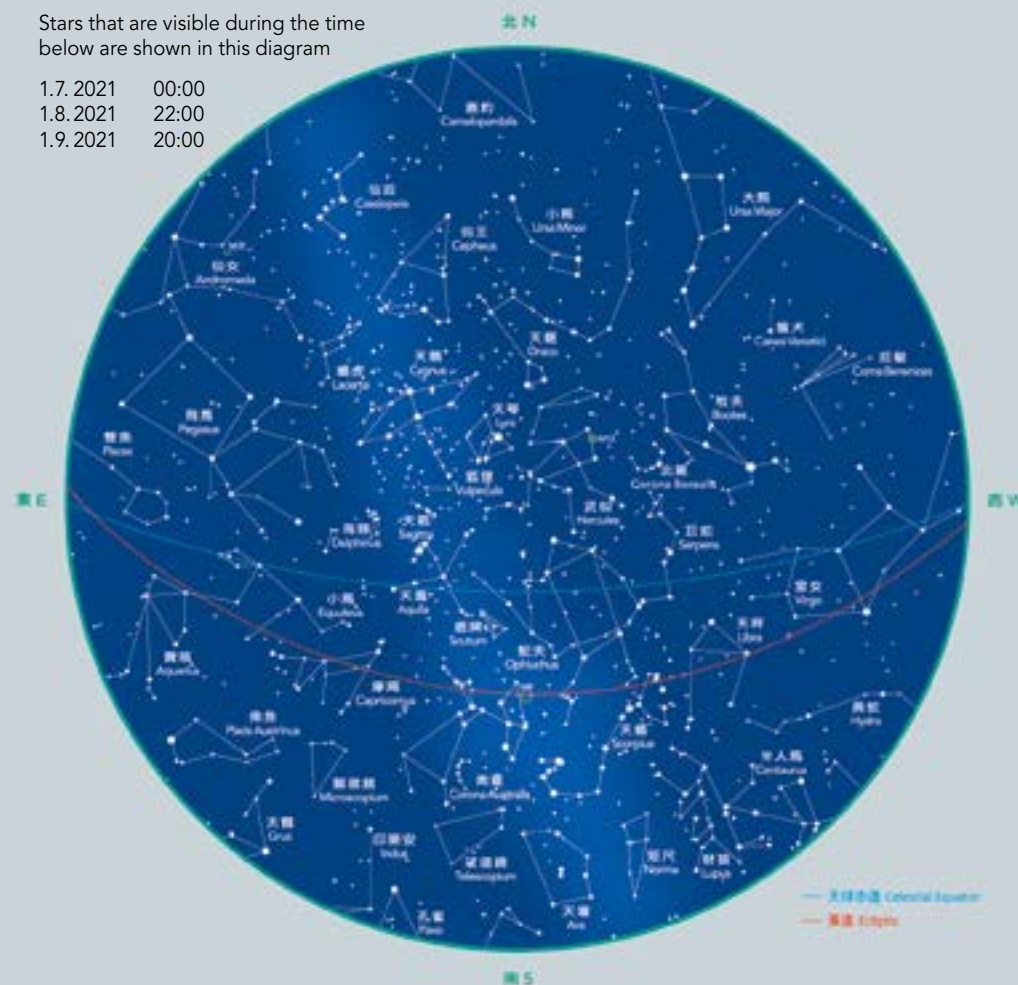
- For school and relevant NGO applications only.
- Please refer to "Ticketing Information" and "Space Theatre Show Schedule" on page 48-49 or call 2734 2720 for show schedule and advance booking. (Monday to Friday: 9:00 am - 1:00 pm, 2:00 - 5:00 pm)

本季星空 Night Sky of the Season

圖中顯示於以下時間可見的全天星空

Stars that are visible during the time below are shown in this diagram

1.7.2021 00:00
1.8.2021 22:00
1.9.2021 20:00



太陽及行星位於地平線上的時間 Time when the Sun and the planets are above the horizon

日期 Date	太陽 Sun	水星 Mercury	金星 Venus	火星 Mars	木星 Jupiter	土星 Saturn
1.7.2021	05:43 – 19:11	04:23 – 17:34	07:37 – 20:54	08:12 – 21:19	22:18 – 09:46	21:12 – 08:19
1.8.2021	05:55 – 19:04	05:52 – 19:07	08:23 – 20:55	07:37 – 20:21	20:09 – 07:34	19:03 – 06:07
1.9.2021	06:06 – 18:40	07:50 – 19:49	09:00 – 20:40	07:00 – 19:19	17:55 – 05:15	16:53 – 03:56

提示：在日出前或日落后，如該行星位於地平線之上，則可嘗試觀測。

Tip: Planets are observable if they are above the horizon before sunrise or after sunset.

數據：美國海軍天文台

Data: United States Naval Observatory (USNO)

神秘圓形天體：奇怪電波圓環

你有沒有試過發現新事物？當你有新發現時，會否感到興奮莫名？

最近，一羣來自澳洲等地的天文學家，從射電望遠鏡數據中發現幾個奇怪的射電波源。這些射電波源的特性不能以現有所知天體去解釋，懷疑光源可能是全新的天體或現象。

以西悉尼大學天文學家雷伊·諾里斯為首的研究團隊，翻查由澳洲平方公里探路者陣列望遠鏡 (ASKAP) 於 2019 年 7 月至 11 月期間收集的無線電（頻率為 800 至 1,088 兆赫）數據，發現三個奇怪的射電波源。射電波源位於南天球的孔雀座和印第安座，大致呈圓形，視直徑約為 80 角秒，沒有發出可見光，只發出微弱的無線電。它們的邊緣稍亮，推斷可能是球體。



ORC 1 的無線電假色疊加到可見光圖像上。
ORC 1 in radio false-colour superimposing on visible light image.

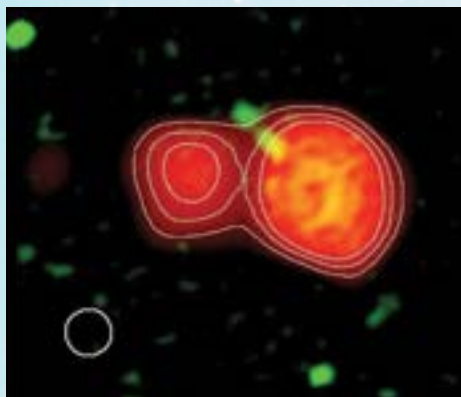
Reproduced with permission of the Licensor through PLSclear

Mysterious Circular Celestial Objects: Odd Radio Circles

Have you ever discovered something new? When you made a new discovery, did you have an inexplicable feeling of excitement and elation?

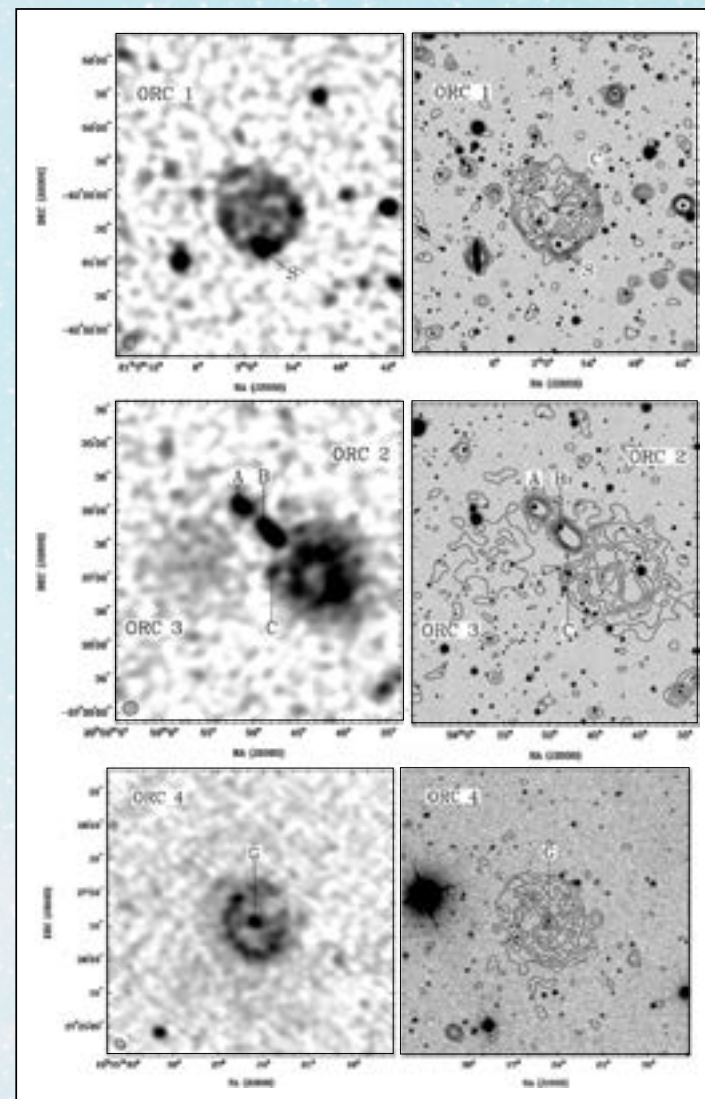
Recently, a group of astronomers from Australia and other countries discovered several strange radio sources from radio telescope data. The sources' characteristics cannot be explained by known celestial objects. It is suspected that the sources may belong to a new kind of celestial objects or phenomena.

The research team led by the astronomer Ray Norris at the University of Western Sydney found three mysterious light sources when looking at radio signals at the frequency 800 to 1,088 MHz received by the Australian Square Kilometre Array Pathfinder (ASKAP) from July to November 2019. Located at the constellations Pavo and Indus in the southern sky, these sources are roughly circular with an apparent diameter of about 80 arcseconds. They emit weak radio radiation without visible light. Their edges are slightly brighter, suggesting that they may be spherical in shape.



ORC 2 (右) 及 3 (左) 的無線電假色圖像。
Radio false-colour images of ORCs 2 (right) and 3 (left).

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左邊為 ORC 1 至 4 的無線電影像，右邊為相應的無線電輪廓疊加到該天區的可見光圖像上。A, B, C, G 和 S 分別標示了前方或背景星系的位置。

On the left are the radio images of ORCs 1 to 4; on the right are the corresponding radio profiles superimposed on visible light images. The positions A, B, C, G and S are the locations of foreground or background galaxies.

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及後，荷蘭萊頓天文台的天文學家團隊翻查巨米波射電望遠鏡在 2013 年 3 月所收集的數百組舊數據（頻率為 325 兆赫），再發現一個類似的射電波源。第四個射電波源位於北天球的北冕座，距離阿貝爾 2142 星系團約 14 角分。

由於四個射電波源的表現怪異，團隊統稱它們為「奇怪電波圓環 (ORC)」，並以代號 ORC 1、ORC 2、ORC 3 和 ORC 4 分辨它們。當中 ORC 2 和 3 在天球上的位置非常接近。

Later, a team of astronomers at the Leiden Observatory in the Netherlands reviewed hundreds of sets of old radio data at the frequency of 325 MHz picked up by the Giant Metrewave Radio Telescope (GMRT) recorded in March 2013. They identified one more similar source from the data. This one is in the constellation Corona Borealis in the northern celestial sphere and is about 14 arcminutes away from the galaxy cluster Abell 2142.

Because of the mysterious nature of these circular celestial objects, the team dubbed each odd radio source with the prefix ORC, which stands for "Odd Radio Circle": ORC 1, ORC 2, ORC 3 and ORC 4. Among them, ORCs 2 and 3 are very close to each other on the celestial sphere.



位於西澳洲的 ASKAP 是由 36 座射電望遠鏡組成的陣列，每部望遠鏡口徑達 12 米，用於快速和高靈敏的巡天觀測。

Located in Western Australia, ASKAP is an array of 36 radio telescopes with an aperture of 12 metres each used for rapid and highly sensitive sky survey observations.

圖片鳴謝 Image credit: The Commonwealth Scientific and Industrial Research Organisation

「大膽假設，細心求證」一向是科學精神的核心。面對新發現，研究團隊興奮雀躍之餘，更化身偵探，細心檢視數據，並將它們與現有天體的特性相比較。以下是部分推測：

影像假象

研究團隊分別利用澳洲望遠鏡緻密陣列和默奇森寬場陣列射電望遠鏡在不同時間觀測相同的天區，並以不同的手法分析數據，都發現 ORC 1 和 2，因此排除假象的可能性。

超新星殘骸

某些恆星會以激烈的超新星爆發結束一生，留下大致圓形的殘骸。雖然 ORC 的外觀與超新星的殘骸頗為相似，但是根據超新星殘骸分布的統計數據，在 ORC 的位置出現超新星殘骸的機率極低，因此 ORC 不太可能是超新星殘骸。

"Boldly hypothesise, carefully verify" has always been the motto of science. Overwhelmed with excitement in the face of possible new discoveries, the research team reviewed the data painstakingly, comparing them with the properties of known astronomical objects. The following are some of the possibilities:

Image Artifacts

The research team used the Australia Telescope Compact Array (ATCA) and Murchison Widefield Array (MWA) radio telescopes independently to observe the skies where the ORCs are located at different times and analysed the data using different methods. They found ORCs 1 and 2 each time. Therefore, they are not likely to be imaging artifacts.

Supernova Remnant

Some stars end their lives with violent supernova explosions, leaving roughly circular debris behind. According to the known distribution of supernova remnants in the sky, while the appearance of ORC is very similar to a supernova remnant, the probability of supernova remnants appearing in the vicinity of the observed ORCs is extremely low. In other words, ORC is unlikely to be a supernova remnant.

超新星殘骸一例：劍魚座的

SNR 0509-67.5。

An example of a supernova remnant:
SNR 0509-67.5 in Dorado.

圖片鳴謝 Image credit: NASA, ESA, and the
Hubble Heritage Team (STScI/AURA)



行星狀星雲

有些恆星在生命末期，氣殼向外膨脹，產生大致圓形的結構。可是行星狀星雲具獨特的射電光譜特徵，與 ORC 的大相逕庭。



行星狀星雲一例：天琴座的戒指星雲 (M57)。

An example of a planetary nebula: the Ring Nebula (M57) in Lyra.

圖片鳴謝 Image credit: NASA, ESA, and C. Robert O'Dell (Vanderbilt University)

環狀星系

部分星系外觀有如車輪，例如玉夫座的车輪星系。然而這些星系都會發出明亮的可見光，與 ORC 沒有發出可見光的特性相反。



環狀星系一例：玉夫座的车輪星系。

An example of a ring galaxy: the Cartwheel Galaxy in Sculptor.

圖片鳴謝 Image credit: ESA/Hubble & NASA

Planetary Nebula

Near the end of the life cycle of some stars, their gas shells expand outward to form a near circular structure. However, planetary nebulae have unique radio spectral characteristics that are distinctively different from that of ORC.

愛因斯坦環

愛因斯坦的廣義相對論指出，物質的重力能夠扭曲空間，形成重力透鏡。假如光源、重力透鏡和觀測者視覺上成一直線，光源會被折曲，呈現出所謂「愛因斯坦環」的光環。不過無線電愛因斯坦環的視直徑一般只有數角秒，即使是較為巨大的愛因斯坦環，都會因物質分布不均而變得不規則，並非如 ORC 般對稱。

愛因斯坦環一例：獅子座的「宇宙馬蹄鐵」，視直徑約為10角秒。

An example of an Einstein's ring: the Cosmic Horseshoe in Leo, with an apparent diameter of about 10 arcseconds.

圖片鳴謝 Image credit: ESA/Hubble & NASA

Einstein Ring

Einstein's general theory of relativity states that matter can distort space in the form of gravitational lensing. If the light source, the gravitational lens and the observer are visually aligned, the light will be gravitationally bent to create an "Einstein Ring". However, a typical radio Einstein ring has an apparent diameter of only a few arcseconds. On the other hand, large Einstein rings are irregular in shape due to the uneven distribution of matter and thus lack ORC's striking circularity.



以上各種推測都未能完全解釋 ORC 目前已知的特性。ORC 既可能是全新的天體，亦可能是某類已知天體的新現象。無論如何，天文學家仍需努力。宇宙總是令人驚喜，你又認為 ORC 是何方神聖？

None of the above hypotheses could fully explain the behaviour of ORC. ORC may be a new type of astronomical objects, or a new previously unknown phenomenon of known celestial bodies. Needless to say, unveiling their mysteries requires further in-depth research. The Universe is always full of surprises. What do you think an ORC is?

欲了解更多，可以細閱研究團隊發表在《澳洲天文學會彙刊》的論文。

To learn more, you can read the paper published by the research team in the "Publications of the Astronomical Society of Australia".

網上版本 Online version: <https://doi.org/10.1017/pasa.2020.52>

副本 Transcript: <https://arxiv.org/abs/2006.14805>

Credit: Ray P. Norris, et.al. (2021), Unexpected Circular Radio Objects at High Galactic Latitude, Publications of the Astronomical Society of Australia, 38, e003, reproduced with permission.

夏季星空之旅

天朗氣清的夏夜，繁星點點，多顆明亮的恆星和它們所組成的星座，成為了夏夜星空的主角，當中包括家喻戶曉的織女星和牛郎星，還有黃道星座中的天蠍座及人馬座。夏季更是欣賞銀河的最好季節，如斯美景，豈容錯過！香港太空館現約你一同於網上觀星，讓大家安坐家中都可欣賞到壯麗的夏夜星空，講者還會即時講解，與大家分享與星星相關的天文知識。

講者：香港太空館助理館長

日期：2021 年 7 月 9 日（星期五）

時間：晚上 8 時至 9 時

平台：香港太空館 YouTube 頻道

網址：<https://www.youtube.com/hkspacem>



Tour of the Summer Night Sky

On a balmy summer night, the starry sky is dominated by many bright stars and their constellations, including the household names like Vega and Altair, and the zodiac constellations Scorpius and Sagittarius. Summer is also the best season to see the Milky Way. Such a splendid sight is definitely not to be missed! The Hong Kong Space Museum is now inviting you to go stargazing through the internet, so that you can enjoy the magnificent summer night sky at home. In addition to guiding you through the stars, the speakers will share with you the knowledge of astronomy in real-time.

Speakers: Assistant Curators of the Hong Kong Space Museum

Date: 9.7.2021 (Friday)

Time: 8:00 pm - 9:00 pm

Platform: YouTube Channel of the Hong Kong Space Museum

URL: <https://www.youtube.com/hkspacem>

英仙座流星雨直播

今年英仙座流星雨的高峰期將會發生在 2021 年 8 月 12 至 13 日期間，香港的觀測者可在當天晚上 10 時起靜候流星出現。若果觀測條件理想，我們每小時可能看到約 10 至 20 顆流星。香港太空館將會在網上為大家直播是次流星雨現象，並即時講解欣賞流星雨的方法及其背後的天文知識。

講者：香港太空館助理館長

日期：2021 年 8 月 12 日（星期四）

時間：晚上 10 時至午夜 12 時

平台：香港太空館 YouTube 頻道

網址：<https://www.youtube.com/hkspacem>



Live Streaming of Perseid Meteor Shower

The Perseid Meteor Shower will peak around 12 and 13 August this year. Observers in Hong Kong may start observing in the evening of 12 August from 10 pm. Under ideal conditions, we may be able to see about 10 to 20 meteors per hour. The Hong Kong Space Museum will live stream this meteor shower event online and introduce the methods of observing meteor showers and the astronomical knowledge behind.

Speakers: Assistant Curators of the Hong Kong Space Museum

Date: 12.8.2021 (Thursday)

Time: 10:00 pm - 12:00 midnight

Platform: YouTube Channel of the Hong Kong Space Museum

URL: <https://www.youtube.com/hkspacem>

中秋說月夜

每逢中秋節大家都會欣賞美麗的滿月，但大家對於月亮的認識又有多少呢？大家有沒有發現月亮表面總有些黑色的地貌？為甚麼我們會說月到中秋分外圓？月亮的顏色和大小會否變化？如果你對月亮充滿疑問，不妨在今年中秋節前參加香港太空館的網上活動，除了可一同窺探月亮的奧秘外，更可即時留言提問，與講者討論有關月亮的種種話題。

講者：香港太空館助理館長

日期：2021年9月20日（星期一）

時間：晚上8時至9時

平台：香港太空館 YouTube 頻道

網址：<https://www.youtube.com/hkspacem>

Moon Talk at the Mid-Autumn Festival

The beautiful full moon is always a visual treat for us at the Mid-Autumn Festival, but how much do we actually know about the Moon? Have you ever noticed those dark patches that always populate the Moon's surface? Why do we say the Moon is exceptionally round during the Mid-Autumn Festival? Do the Moon's colour and size ever change? If you have loads of questions about the Moon, join this online programme hosted by the Space Museum on the eve of the Mooncake Festival. The speakers will share with you fascinating facts and snippets about the Moon. You can also ask questions by sending us instant messages.

Speakers: Assistant Curators of the Hong Kong Space Museum

Date: 20.9.2021 (Monday)

Time: 8:00 - 9:00 pm

Platform: YouTube Channel of the Hong Kong Space Museum

URL: <https://www.youtube.com/hkspacem>



中學生天文訓練計劃

「中學生天文訓練計劃」由香港太空館、香港中文大學物理系及香港天文學會合辦，對象為中四及中五的香港全日制學生，目的是讓同學有機會接受較全面的天文學訓練，從中培養及提升對自然科學的興趣。另一方面，我們亦希望參與計劃的同學能將所學的回饋學校，在校內協助推廣天文活動，讓更多同學領略箇中樂趣。為達到上述目的，計劃內容將同時兼顧理論及實踐兩方面，透過多元化的活動，例如教學講座、工作坊及觀星實習等增進同學的天文學知識；而更重要的是培養科學探究精神，以及獨立處理問題和組織活動的能力。

在理論課程方面，學員會親身到香港中文大學一嚐在大學校園學習的滋味。課程由中文大學物理系負責講授，共分兩個學期，內容由淺入深；第一學期會先教授基本天文知識，例如現代天文學的起源、天體運動和曆法等；而第二學期則會觸及大學程度的天文理論，例如黑洞、相對論和宇宙學。

就實踐方面，學員會到香港太空館參與由本地天文教育工作者主持的工作坊和觀測活動。香港太空館會在氣象廳以星象投影系統帶領學員漫遊星空，而香港天文學會則會教授基本的目視觀測技巧，以及探討不同天文望遠鏡、雙筒望遠鏡和星圖的特性和使用方法。

本計劃同時為香港中文大學理學院少年英才科學院的認可課程，出席率達標並通過筆試和實習試的學員除可獲頒畢業證書外，更可獲得兩個香港中文大學的學分。報名期由2021年9月中旬至10月上旬；有興趣的同學可瀏覽以下網頁了解詳情：

https://www.lcsd.gov.hk/CE/Museum/Space/zh_TW/web/spm/activity/education_st.html

參加者資格：2021/22 年度修讀中四或中五的香港全日制學生

活動時期：2021年11月至2022年5月

名額：100位，合辦機構會根據申請者於報名表提供的資料考慮取錄與否
費用：全免

授課語言：粵語輔以英語



第二十一屆中學生天文訓練計劃完滿結束。



理論課堂由香港中文大學物理系講師梁寶建博士講授，學員可循序漸進地學習天文知識。



學員在導師的指導下認識天文望遠鏡的結構及嘗試觀測。

注意 Note:

所有講座均免費參加，座位先到先得。

All lectures are free. Admission is offered on a first-come, first-served basis.

天文研究與發展

Research and Developments in Astronomy

與香港觀天會合辦 Co-organised with Space Observers H.K.

(除第一節外，講座以粵語講解 All sessions will be conducted in Cantonese except session 1)

地點：香港太空館演講廳

Venue: Lecture Hall, Hong Kong Space Museum

第一節：外星人在哪裏呢？很遙遠，很遙遠！

恆星之間的距離非常遙遠，我們目前只探索了宇宙的一小部分。雖然科學家成功找到一些如地球般適居的系外行星並嘗試探測行星上的生命跡象，但在現階段我們還未有足夠的技術去偵測外星智慧生命。然而，在探討浩瀚的宇宙中是否存有其他智慧生命前，我們必須先了解系外行星的種類，以及有多少顆行星適合孕育生命。

講者：曾耀博博士（系外行星天文學家）

日期：2021 年 7 月 11 日（星期日）

時間：下午 2 時 30 分至 4 時

Session 1: Where are Extraterrestrials? Far, Far Away !

The distances between stars are so vast and we have only surveyed a tiny piece of the Universe. Although the scientists finally found some "habitable" planets like the Earth and tried to detect life, we do not have the ability and technology to detect extraterrestrial intelligent species yet. However, before discussing where extraterrestrial intelligent life should exist, we shall first understand what kind of planets are there in the Universe and how many of them are suitable for hosting life.

Speaker: Dr. Stuart Taylor (Exoplanet Astronomer)

Date: 11 July 2021 (Sunday)

Time: 2:30 – 4:00 p.m.

第二節：黑洞

甚麼是黑洞？愛因斯坦的廣義相對論指出，黑洞的引力極大，可以扭曲時空，所有物質，甚至連光都無法逃離它的事件視界（亦即其邊界）。黑洞的特性奇異，它與所屬的星系沿着同一方向轉動時，亦會拖曳着周圍的空間旋轉，而落入旋轉黑洞中的物質也會在旋轉的空間中加速。此講座將介紹於 2017 和 2020 年榮獲諾貝爾物理學獎的黑洞研究成果及分析黑洞奇異的特性；參加者能欣賞由口徑有如地球直徑般大的望遠鏡所拍攝的黑洞影像及透過重力波聆聽黑洞碰撞的聲音。

講者：許如藝教授（美國亞利桑那州立大學榮休教授）

日期：2021 年 8 月 8 日（星期日）

時間：下午 2 時 30 分至 4 時

第三節：幾個有關中國古天文中的研究項目

中國的天文觀測歷史悠久，古人以肉眼所見的月海形狀創造出多個月亮神話，又訂立十二地支配合十天干來記錄時間、日期、方向，更將月亮每晚在天上的軌道劃分成二十八宿。講者鑽研天文學多年，在此講座中，將與參加者分享幾項他個人在中國古天文領域上的新見解。

講者：陳鑄略先生（香港觀天會學術顧問）

日期：2021 年 8 月 21 日（星期六）

時間：下午 2 時 30 分至 4 時

第四節：探討以模擬方式推演可視化天文現象

此講座將探討如何採用簡易模型，以可視化方式推演天文現象。參加者可從中認識此技術背後的理念、原理，及當中所使用的器材和有關資源。講者更會讓參加者了解如何利用天文觀測數據去改良推演天文現象的模型。

講者：余惠俊先生（香港觀天會學術顧問）

日期：2021 年 8 月 22 日（星期日）

時間：下午 2 時 30 分至 4 時

系外行星的生命探索

Searching for Life on Exoplanets

科學家是如何發現「遠在天邊」的系外行星呢？他們又會收集哪些數據去評估系外行星能否支持生命，或探測潛在的生命跡象訊號 (Biosignatures)？自 2019 年諾貝爾物理學獎授予兩位從事系外行星研究的科學家，大眾再次關注在系外行星上探測到生命的可能性。此講座將探討偵測系外生命的技術發展，並介紹現行相關的探索計劃。

講者：馬學綸博士（香港天文學會教育委員）

日期：2021 年 8 月 14 日（星期六）

時間：下午 2 時 30 分至 4 時

地點：香港太空館演講廳

天文旅遊專輯

An Astronomical Tour around the World

雖然我們在疫情期間不能外遊，但我們仍可來一趟「眼睛旅行」，預先計劃日後的旅行目的地。想籌備一次集娛樂與天文學術於一身的旅程，卻苦於不知從何入手？此講座將會介紹數個熱門旅遊國家的觀星好去處，讓參加者輕鬆踏上「摘星之旅」。

講者：彭栩怡先生（天文匯主席）

龍嘉穎小姐（天文匯資深天文導師）

時間：下午 7 時至 8 時 30 分

地點：香港太空館演講廳

第一節：澳紐之最

日期：2021 年 9 月 2 日（星期四）

第二節：美加傳奇

日期：2021 年 9 月 9 日（星期四）

第三節：新「星」：夏威夷

日期：2021 年 9 月 16 日（星期四）

夏季星夜

Starry Sky in Summer

(粵語講解 To be conducted in Cantonese)

香港夏季的夜空從來都不乏明亮的星星，除了大家耳熟能詳的織女星和牛郎星外，亦有不少容易辨認的星座。就讓我們一同把握暑假，帶同小朋友到空氣清新、光害較少的野外欣賞繁星點點的夜空，認識中西方星宿美麗動人的故事。活動並包括天文公園導賞，讓參加者認識中國古代的天文儀器，絕對是一個內容豐富有趣，讓你從多角度認識天文學的親子之旅。

活動內容：透過工作坊學習基本觀星技巧；遊覽天文公園（由太空館助理館長導賞），並以肉眼或使用天文望遠鏡觀星。

主持：香港太空館助理館長

日期：2021 年 8 月 7 日（星期六）

活動時間：下午 4 時至晚上 9 時 30 分（須自備晚餐）

集合時間及地點：下午 3 時 45 分於香港太空館大堂詢問處集合

解散時間及地點：約晚上 9 時 30 分於西貢市中心或彩虹港鐵站（可選擇）解散

參加費用：每位港幣 60 元*

名額：40 人**

報名日期：2021 年 7 月 9 日至 19 日

（所有表格須於 2021 年 7 月 19 日或之前送抵本館，詳情請參閱報名表格）

親子活動報名辦法：

請於報名日期內提交填寫好的報名表格。請留意每個家庭只需提交一份報名表格，而每份報名表格只供一個家庭填寫。表格刊於下頁，亦可於太空館詢問處索取或由太空館網站下載。請於提交表格前參閱第 44 頁的「活動報名須知」。

*博物館通行證持有人九折優惠

全日制學生、殘疾人士及 60 歲或以上高齡人士半價優惠

**核心家庭：由 18 歲以上父母或監護人攜同最多兩名 6 至 15 歲的兒童參加，所有名額以抽籤方式分配。抽籤結果將於 7 月 21 日在香港太空館網站及大堂公布。

注意：活動主要於戶外舉行，參加者請帶備足夠食水、防蚊及防曬裝備。
如天氣欠佳，活動內容將有所更改或取消。



親子活動報名表格

Family Programme Application Form

Application No.
(for internal use only)

活動日期 Date of Activity	活動名稱 Programme Title	參加人數 No. of Participants
7/8/2021	夏季星夜 Starry Sky in Summer	

1. 每份報名表只供一個家庭填寫，最多 4 人，最少 2 人報名。（此表格可自行複印使用）
Each application form is for one family only. Minimum no. of participant 2, maximum no. of participant 4. (Photocopies of this form will also be accepted)
2. 成功申請者將會於活動開始前兩星期或更早收到確認電郵及通知有關繳付費用方法。有關報名詳情請參閱第 44 頁之「活動報名須知」。
Successful applicants will receive a confirmation email with the information on payment method not later than two weeks before the commencement of the programme. Please refer to "Notes on Application of Activities" on page 44 for details of application.

參加者資料 Particulars of Participants[†]（參加者必須符合年齡要求 Participant must meet the age requirements）

參加者 (1) Participant (1)	姓名 Name	年齡 Age	關係 Relationship
參加者 (2) Participant (2)	姓名 Name	年齡 Age	關係 Relationship
參加者 (3) Participant (3)	姓名 Name	年齡 Age	關係 Relationship
(如適用 if applicable)			
參加者 (4) Participant (4)	姓名 Name	年齡 Age	關係 Relationship
(如適用 if applicable)			
通訊地址 Correspondence Address			聯絡電話 Telephone No.
電郵 Email	日期 Date	簽名 Signature	

- [†] 1. 本表格所收集的個人資料，乃由你自願提供，用於申請香港太空館舉辦的節目，並只供本館職員及有關的導師查閱。本表格所有資料必須填寫，資料不足者，申請恕不受理。
2. 根據個人資料（私隱）條例第 18 及 22 條及附表 1 第 6 項原則的規定，你有權要求查閱及更改本表格所載的個人資料。如要提出有關要求，請致函九龍尖沙咀梳士巴利道十號香港太空館或致電 2734 2711 與本館學校節目組助理文書主任聯絡。

- [†] 1. The personal data collected in this form is used for applying programme organised by the Hong Kong Space Museum and is given of your own accord. The data will be accessed only by staff of the Museum and related tutor(s). All fields in this form should be filled in. If you do not provide sufficient information, we will not be able to process your application.
2. You have the rights to request access to and correct the personal data as stated in this form in accordance with Sections 18 and 22 and Principle 6 of Schedule 1 to the Personal Data (Privacy) Ordinance. To make such request, please contact the Assistant Clerical Officer of School Programme Section at 2734 2711 or mail to the Hong Kong Space Museum, 10 Salisbury Road, Tsim Sha Tsui, Kowloon.

父母 / 監護人姓名
Name

地址
Address

父母 / 監護人姓名
Name

地址
Address

認識星空

The Starry Sky

(粵語講解 To be conducted in Cantonese)

天上一閃一閃的星星能引發小朋友無窮的想像力和好奇心。「認識星空」會透過趣味盎然的遊戲和DIY星圖，引領小朋友進入奇妙的星空世界——由引人入勝的星座傳說和神話故事作起點，讓小朋友認識天上的星體和學習天文學的基本知識，導師更會教授如何觀星。

導師：梁振聲博士

(香港天文學會理論天文組組長)



編號	日期	時間	年齡限制	名額
2121a	2021年8月4日(星期三)	10:30 am – 12:30 pm	6 – 9 歲	30
2121b	2021年8月11日(星期三)	10:30 am – 12:30 pm	6 – 9 歲	30

太空生活指南

Space Guide 101

(粵語講解 To be conducted in Cantonese)

在漫遊宇宙之前，我們必須乘搭火箭出發往太空！究竟火箭為何能飛上太空呢？人類在太空又如何解決衣、食、住、行等基本需要？「太空生活指南」會以有趣的球幕短片配合相關的科學示範，讓小朋友了解在太空生活的挑戰和樂趣。

導師：香港太空館助理館長

編號	日期	時間	年齡限制	名額
2122a	2021年8月10日(星期二)	10:30 am – 12:00 noon	9 – 12 歲	30
2122b	2021年8月24日(星期二)	10:30 am – 12:00 noon	9 – 12 歲	30

趣味希臘神話

An Introduction to Greek Mythology

(粵語講解 To be conducted in Cantonese)

一個星座，一個故事。天上很多星座的西方名稱，都是源自希臘眾神在人間流傳的故事。「趣味希臘神話」會以有趣好玩的分組遊戲，讓小朋友認識希臘神話中眾位「性格巨星」，從而在玩遊戲聽故事之餘，對天上各星座有更深入的了解。

導師：龍嘉穎小姐

(天文匯資深導師)



編號	日期	時間	年齡限制	名額
2123a	2021年8月17日(星期二)	10:30 am – 12:30 pm	6 – 9 歲	30
2123b		2:30 pm – 4:30 pm	6 – 9 歲	30



望遠鏡解構

Understanding the Telescope

(粵語講解 To be conducted in Cantonese)

自四百多年前伽利略首次用望遠鏡觀看夜空，令天文學從此急速發展。「望遠鏡解構」讓參加者透過光學實驗及觀看望遠鏡的內部構造，學習望遠鏡的原理。學員更可嘗試組裝望遠鏡，並使用真正的天文望遠鏡進行模擬觀測，打開探索宇宙的大門。

導師：梁榮榮先生

(香港青年天文協會會長)

編號	日期	時間	年齡限制	名額
2124a	2021年8月19日(星期四)	10:30 am – 12:30 pm	9 – 12 歲	30
2124b		2:30 pm – 4:30 pm	9 – 12 歲	30

地點：香港太空館演講廳或天象廳

費用：除 2122a 及 2122b 以外，每節港幣 48 元；2122a 及 2122b 每節港幣 36 元
（已包括學生半價優惠）

報名日期：2021 年 7 月 9 日開始接受報名，截止報名日期為 2021 年 7 月 19 日
（所有表格須於 2021 年 7 月 19 日或之前送抵本館，詳情請參閱報名表格）

報名辦法：請於報名日期內提交填寫好的報名表格。請留意每位參加者只需提交一份報名表格，而每份報名表格只供一位參加者填寫。表格刊於下頁，亦可於太空館詢問處索取或由太空館網站下載。請於提交表格前參閱第 44 頁的「活動報名須知」。
所有名額以抽籤方式分配。抽籤結果將於 7 月 21 日在香港太空館網站及大堂公布。

注意：參加者須符合年齡要求並於繳費時提交年齡證明，該證明將於活動當日發還。



兒童趣味天文班報名表格 Fun Astronomy Class Application Form

Application No.
(for internal use only)

編號 Code #			課程名稱 Course Title
2121a		2121b	
2122a		2122b	
2123a		2123b	
2124a		2124b	

請在適當的方格內填上翻號“√”來表示你的選擇。
Please indicate your preference by putting a “√” in the appropriate box.

每位參加者只可選擇a或b其中一個時段，如選多於一個時段將不受理。
Each applicant should select one time slot only (a or b) for each class. Applicant who select more than one time slot per class will not be accepted.

報名時毋須繳交費用，獲取錄者將收到確認電郵通知繳費方法。有關報名詳情請參閱第44頁之「活動報名須知」。
Please do not pay now. Successful applicants will receive a confirmation email with the instruction of payment. Please refer to “Notes on Application of Activities” on page 44 for details of application.

兒童資料 Particulars of Child[†]（參加者必須符合年齡要求 Participant must meet the age requirements）

姓名 Name _____ 出生日期 Date of Birth _____

父母 / 監護人資料 Particulars of Parent / Guardian[†]

姓名 Name Mr / Miss / Ms* _____ 先生 / 小姐 / 女士*

關係 Relationship _____ 聯絡電話 Telephone No. _____ 電郵 Email _____

通訊地址 Correspondence Address _____

日期 Date _____ 簽名 Signature _____

* 請刪去不適用者。 Delete as appropriate.

- [†] 1. 本表格所收集的個人資料，乃由你自願提供，用於申請香港太空館舉辦的節目，並只供本館職員及有關的導師查閱。本表格所有資料必須填寫，**資料不足者，申請恕不受理。**
2. 根據個人資料（私隱）條例第18及22條及附表1第6項原則的規定，你有權要求查閱及更改本表格所載的個人資料。如要提出有關要求，請致函香港九龍尖沙咀梳士巴利道十號香港太空館或致電2734 2711與本館學校節目組助理文書主任聯絡。
- [†] 1. The personal data collected in this form is used for applying programme organised by the Hong Kong Space Museum and is given of your own accord. The data will be accessed only by staff of the Museum and related tutor(s). All fields in this form should be filled in. **If you do not provide sufficient information, we will not be able to process your application.**
2. You have the rights to request access to and correct the personal data as stated in this form in accordance with Sections 18 and 22 and Principle 6 of Schedule 1 to the Personal Data (Privacy) Ordinance. To make such request, please contact the Assistant Clerical Officer of School Programme Section at 2734 2711 or mail to the Hong Kong Space Museum, 10 Salisbury Road, Tsim Sha Tsui, Kowloon, Hong Kong.

父母 / 監護人姓名
Name _____

地址
Address _____

父母 / 監護人姓名
Name _____

地址
Address _____

愛因斯坦與霍金

一連兩集的節目探究百多年來，科學家如何一直嘗試把廣義相對論和量子理論結合起來。不要以為我們在談科學史，愛因斯坦和霍金雖已物故，但他們的思想仍在塑造物理學的發展。影片中介紹多位當代科學家以兩位前輩的成就作基石，利用尖端科技將他們的思想更推上一層樓。影片搜集了愛因斯坦和霍金昔日的採訪和錄影片段，讓兩位科學家重現眼前，激盪出新的討論、分歧和見解。兩位科學巨人，兩個驚世理論，這是兩位宇宙巨擘的故事。

第一集 (片長: 52 分鐘)

第一集介紹霍金的個人，他如何克服運動神經細胞疾病，以及他的物理學研究工作。影片涵蓋他的童年、求學、婚姻和家庭生活，當然還有他在宇宙大爆炸及黑洞方面的研究。

第二集 (片長: 52 分鐘)

討論弦理論和超對稱。愛因斯坦的廣義相對論引發宇宙不斷膨脹的概念，因而衍生出宇宙大爆炸理論。霍金將用量子力學的「測不準定理」應用在黑洞上，提出完全違反直覺的理論——黑洞不是一味的吞噬物質，它們也會「蒸發」，釋放出粒子，即「霍金輻射」。

外星人：大構想

(片長: 51 分鐘)

「尋找外星人」或許並非如你所想，只是科幻小說的情節。探索地外生命是當今科學前沿中一個爭論激烈的領域。皇家天文學家馬丁里斯帶領觀眾探討人類對宇宙認知的局限，以及我們在宇宙中的位置。他認為我們對外星人的構想大錯特錯——人類要尋找的不是有機生命體，而是機械。

Einstein and Hawking: Masters of Our Universe

This 2-part series explores how, for over 100 years, scientists have tried to marry general relativity and quantum theory together. This is not science history. Einstein and Hawking's ideas are still shaping physics. Meet the modern scientists pushing their work even further. Using the boldest technologies, these contemporary trailblazers are building on the brilliance of their predecessors. Using interviews and recordings of Einstein and Hawking, both scientists are brought back to life - creating new discussions, disagreements and insights into their lives. Two titans of science. Two mind-blowing theories. This is the story of the masters of the Universe.

Episode 1 (Duration: 52 minutes)

The first part describes Hawking's personal life, his challenges in overcoming his motor neuron disease, and his career in physics. It covers his childhood, education, marriage, family life, and his work on the Big Bang and Black Holes.

Episode 2 (Duration: 52 minutes)

The second part discusses string theory and supersymmetry. Einstein's theory of general relativity leads to the concept of an expanding universe that leads to the theory of the Big Bang. Applying the uncertainty principle of quantum mechanics to black holes, Stephen Hawking shows that black holes "evaporate". Known as "Hawking Radiation", it is counterintuitive as it shows that these cosmic giants emit quantum particles.

Aliens: The Big Think

(Duration: 51 minutes)

You might think hunting for aliens is just science fiction. You would be wrong. It is a vibrant frontier of modern science, where fierce debates rage. In this programme, the Astronomer Royal, Martin Rees, explores the limits of our understanding of the universe and our place in it. It is a journey that, for Martin, leads to an extraordinary conclusion. Our idea of what an alien will be is all wrong. It is not organic beings we should be looking for. It is machines.

改變世界的革命性意念

汽車、飛機、智能手機、火箭、機械人、望遠鏡，我們把這些工具視為理所當然。然而，這些發明都是人類成就的巔峰。當中望遠鏡及火箭與天文及太空探索息息相關，它們皆源自人類特有的好奇心及探索精神，再經過多年來的意外發現、突破、了解和奇跡才可誕生。

望遠鏡 (片長: 53 分鐘)

望遠鏡的發明，帶來歷史上最偉大的發現——宇宙。千百年來，人類一直為夜空着迷，他們煞費苦心，建造出精巧的建築，目的只為與天上星體的運行連結起來。雖然天上的世界看似遙不可及，但我們可以透過望遠鏡認識無數夜空中的天體，深深體會宇宙的迷人之處。

火箭 (片長: 53 分鐘)

在人類所有偉大發明中，火箭具有改變整個物種的潛力。節目探討火箭能否使人類離開地球家園，成為宇宙公民。目前正在進行新一輪的太空競賽，但火箭的濫觴竟然出乎意料的古老。

月亮奇蹟

(片長: 52 分鐘)

影片帶領觀眾到世界各地探究不同的月亮奇觀——血月、超級月亮和日全食。弱光攝影在天然光下呈現月球鮮為人見，最為真實的一面，以及月球如何影響地球。影片帶觀眾到南太平洋繽紛的海底世界，了解珊瑚礁如何隨着月亮的盈虧生長；在美國經歷日全食如何將白晝變成夜晚；攝製隊還來到香港與我們一起歡度中秋佳節，一同感受月亮的魅力。

Revolutions: The Ideas that Changed the World

The car. The airplane. The smartphone. The rocket. The robot. The telescope. We take these devices for granted, yet each one is a pinnacle of human achievement. Among them, the telescope and rocket are the keys to astronomy and space exploration. They are the result of years of accidents, breakthroughs, insights and wonders. Each was born out of the distinctive human curiosity and spirit of exploration.

The Telescope (Duration: 53 minutes)

The telescope is the invention that allowed the greatest discovery in history - the Universe itself. Over the millennia, humans built ever more elaborate constructions aligned with the heavens, revealing our ancient fascination with the night sky. Although the heavens seem far away, telescopes allow us to study the countless celestial objects in the night sky. They make us understand why we are so fascinated by the Universe.

The Rocket (Duration: 53 minutes)

Of all our great inventions, the rocket is truly the one with the potential to change the entire species, allowing us to leave our Earthly home and become citizens of the Universe. Right now, there is a new space race under way. But the origins of the rocket are surprising old.

Wonders of the Moon

(Duration: 52 minutes)

Blood moons, super moons and total eclipses. Explore a stunning medley of lunar delights from across the globe. Low light cameras reveal the moon in its natural light, in ways that have rarely been witnessed, and illustrate its extraordinary influence over our planet. Travel to the rich undersea world of the South Pacific, where the coral reefs breed in synch with the moon cycles; watch the total eclipse transform day to night across the United States; witness the Mid-Autumn Festival in Hong Kong, where the entire city falls under the moon's spell.

電影播放時間表 Film Schedule

7 月 July	11.7.2021 星期日 Sunday	7:00 – 8:00 pm	愛因斯坦與霍金 (第一集) Einstein and Hawking: Masters of Our Universe (Episode 1)
		8:00 – 9:00 pm	愛因斯坦與霍金 (第二集) Einstein and Hawking: Masters of Our Universe (Episode 2)
	18.7.2021 星期日 Sunday	2:30 – 3:30 pm	改變世界的革命性意念：望遠鏡 Revolutions: The Ideas that Changed the World – The Telescope
		3:30 – 4:30 pm	外星人：大構想 Aliens: The Big Think
8 月 August	18.8.2021 星期三 Wednesday	2:30 – 3:30 pm	月亮奇蹟 Wonders of the Moon
		3:30 – 4:30 pm	改變世界的革命性意念：火箭 Revolutions: The Ideas that Changed the World – The Rocket
9 月 September	19.9.2021 星期日 Sunday	2:30 – 3:30 pm	改變世界的革命性意念：火箭 Revolutions: The Ideas that Changed the World – The Rocket
		3:30 – 4:30 pm	月亮奇蹟 Wonders of the Moon

地點：香港太空館演講廳
英語旁述，配以中文字幕
即場免費入座，座位先到先得

Venue: Lecture Hall, Hong Kong Space Museum
Narrated in English with Chinese subtitles
Free admission on a first-come, first-served basis

星空遊樂園

(粵語為主，輔以英語講解)

太空館將於一夜間化身成「星空遊樂園」——每位走進來的公眾都可以自由參與館內各處不同的活動及遊戲，例如在天台使用天文望遠鏡觀賞維港上的月光；在大堂參與攤位遊戲認識星座和太陽系的行星等。不論大人或小朋友都可以在館內度過一個充實有趣的晚上。

日期：2021 年 8 月 18 日 (星期三)

香港太空館助理館長、
文博義工及星匯點主持

時間：晚上 7 時 30 分至 9 時

地點：香港太空館大堂及天台

即場免費於活動地點輪候參加。

Starry Wonderland

(To be conducted in Cantonese, supplemented with English)

The Space Museum will transform into a wonderland for one evening. Each participant can enjoy different activities at various locations inside the museum. They can observe the Moon with an astronomical telescope at the rooftop, or learn about the constellations and the Solar System planets at the foyer. Adults and kids will both have a fruitful and enjoyable evening at the museum.

Date: 18.8.2021 (Wednesday)

Hosted by Assistant Curators of the
Hong Kong Space Museum, Museum
Volunteers and Starrix

Time: 7:30 – 9:00 pm

Venue: Foyer and Rooftop,
Hong Kong Space Museum

Free admission. Queue up at various locations to join.



注意：如天氣欠佳，觀測活動會以室內活動代替或取消。

Note: The observation activities are subject to prevailing weather conditions and may be replaced by indoor activities or cancelled.

活動報名須知 (只適用於須報名參加的活動)

- 已填妥的報名表格，必須於截止報名當日或之前循以下途徑交回：
 - 寄回九龍尖沙咀梳士巴利道十號香港太空館學校節目組，並於信封面註明活動名稱
 - 投入設於香港太空館大堂內的「報名表格收集箱」
 - 傳真至 2367 8320
 - 電郵至 acoslib@lcsd.gov.hk
 逾期恕不受理，恕不接受電話報名或留位。
- 每個申請單位只可就同一活動遞交一份申請表格，如遞交多於一份表格將不予受理。
- 如活動的名額以抽籤分配，抽籤結果會於香港太空館的網頁(<https://hk.space.museum>)及大堂公布。獲取錄者將收到電郵通知繳費詳情，未獲取錄者恕不另行通知。
- 獲取錄者須於指定期間內繳交活動之費用，未能如期繳交者，當棄權論，名額即由後補名單填補。
- 若活動於截止報名日期後仍有餘額，則以「先到先得」形式繼續接受報名。
- 除活動被取消外，已繳費用，概不退還。活動名額不得轉讓，亦不得將已繳費用轉作申請參與其他活動。
- 在必要時，香港太空館有權更改活動的講者、日期、時間及地點。
- 請留意本館的惡劣天氣特別安排。若活動因惡劣天氣而取消，本館將個別聯絡各個參加單位通知有關安排。
- 查詢電話：2734 2711 (星期一至五：上午九時至下午一時，下午二時至五時)。

Notes on Application of Activities (Only applicable to activities where application is required)

- The completed application form should reach the Hong Kong Space Museum by the following methods before the closing date:
 - Mail to School Programme Unit, Hong Kong Space Museum, 10 Salisbury Road, Tsim Sha Tsui, Kowloon; with the name of the activity on the envelope
 - Drop into the collection box at the museum foyer
 - Fax to 2367 8320
 - Email to acoslib@lcsd.gov.hk
 Late applications will not be processed. Application or reservation by phone is not accepted.
- Each application unit should submit one form only for each activity. Applicants or family who submit more than one application form will not be processed.
- When the participants of the activity are to be selected by drawing lots, the result will be announced on the museum website (<https://hk.space.museum>) and posted at the foyer of the Hong Kong Space Museum. Successful applicants will receive a confirmation email with the instruction of payment and there will not be notification for unsuccessful applicants.
- Successful applicants should settle the payment within the specified period. Otherwise, the places will be given to those on the waiting list.
- If there are vacancies after the deadline, application will be accepted on a first-come, first-served basis.
- Fee is non-refundable except in the event of cancellation of activity. It is also non-transferable to other applicants or activities.
- The Hong Kong Space Museum reserves the rights to change the lecturers, date, time and place of activity when it deems necessary.
- Please pay attention to our inclement weather special arrangement. If an activity is cancelled under inclement weather, the participating unit will be notified of the related arrangement.
- Enquiries: 2734 2711 (Mon to Fri: 9:00 am to 1:00 pm, 2:00 to 5:00 pm)

博物館通行證 MUSEUM PASS

帶給你精彩的藝術・歷史・科學體驗

Brings you inspiring experiences
in Art・History・Science



博物館通行證持有人可享以下優惠：

- 於博物館通行證有效期內可無限次參觀康樂及文化事務署轄下博物館的常設及專題展覽（特定的專題展覽除外）。
- 於設在博物館內的禮品店／書店購買康樂及文化事務署製作的刊物及紀念品可獲九折優惠（孫中山紀念館除外）。
- 於設在博物館內的指定餐廳惠顧可享優惠。
- 參與博物館主辦的活動（如教育推廣活動）可獲九折優惠。參加活動費用倘為優惠價錢，則不能同時享有此優惠。
- 由現在起至 2022 年 8 月 31 日，博物館通行證持有人申請香港迪士尼樂園成人、小童／學生及長者「奇妙處處通」可分別享有 HK\$60、HK\$50 及 HK\$40 折扣優惠。優惠受條款及細則約束。查詢熱線 (852)1-830-830。有關票價、條款及細則，請瀏覽香港迪士尼樂園網站 (<https://www.hongkongdisneyland.com/zh-hk/>)。

Privilege Offers for Museum Pass Holders:

- Unlimited admission to the permanent and special exhibitions (unless otherwise specified) of museums under Leisure and Cultural Services Department (LCSD Museums) during the validity period of the Museum Pass.
- 10% discount on purchase of souvenirs and publication produced by Leisure and Cultural Services Department at museum gift shops/book shops (except Dr Sun Yat-sen Museum).
- Special offers at specific catering outlets in LCSD Museums.
- 10% discount on participation in museum extension activities solely organised by LCSD Museums (e.g. educational programmes). This discount is not applicable to fees which are already discounted under other concessionary schemes.
- From now to 31 August 2022, Museum Pass Holders can enjoy a discount of HK\$60, HK\$50 and HK\$40 off the published price respectively for the purchase of Adult, Child / Student and Senior Magic Access of the Hong Kong Disneyland Park. Enquiries Hotline: (852)1-830-830. Terms and conditions apply. Visit Hong Kong Disneyland website (<https://www.hongkongdisneyland.com/>) for published price and detailed terms and conditions.

博物館通行證全年* 票價 Museum Pass Annual* Fee

家庭通行證（適用於最多四人，須為親屬）
Family Pass (for a maximum of 4 persons of kinship) **HK\$100**

個人通行證
Individual Pass **HK\$50**

優惠通行證
Concessionary Pass **HK\$25**
（只適用於全日制學生、殘疾人士、60 歲或以上高齡人士）
(full-time students, people with disabilities and senior citizens aged 60 or above)

* 博物館通行證的使用期限為簽發日期起 12 個月內。
Museum Pass is valid within 12 months from the date of issue.

注意：博物館通行證不適用於天象廳節目。
Note: Museum Pass cannot be used for Space Theatre Shows.

申請博物館通行證及續證，可於下列博物館辦理：
Application for and renewal of museum passes can be done at the following museums:

- 孫中山紀念館 Dr Sun Yat-sen Museum
- 香港文化博物館 Hong Kong Heritage Museum
- 香港藝術館 Hong Kong Museum of Art
- 香港歷史博物館 Hong Kong Museum of History
- 香港科學館 Hong Kong Science Museum
- 香港太空館 Hong Kong Space Museum

下載申請表格及更多有關博物館通行證的詳情，請見以下網址：
https://www.museums.gov.hk/zh_TW/web/portal/museum-pass.html
For download of application form and more details about the Museum Pass, please visit the website:
https://www.museums.gov.hk/en_US/web/portal/museum-pass.html



孫中山紀念館*
香港中環半山衛城道7號
星期四休館 查詢電話：2367 6373

葛量洪號滅火輪展覽館
香港鯉魚涌公園
星期二休館 查詢電話：2367 7821

茶具文物館
香港中區紅棉路10號（香港公園內）
星期二休館 查詢電話：2869 0690

香港電影資料館
香港西灣河鯉景道50號
星期二休館 查詢電話：2739 2139

香港文化博物館*
香港新界沙田文林路1號
星期二休館 查詢電話：2180 8188

香港藝術館*
香港九龍尖沙咀梳士巴利道10號
星期四休館 查詢電話：2721 0116

香港海防博物館
香港筲箕灣東喜道175號
（現關閉以進行翻新工程）
查詢電話：2569 1500

香港歷史博物館*
香港九龍尖沙咀漆咸道南100號
（香港科學館側）
星期二休館 查詢電話：2724 9042

香港鐵路博物館
香港新界大埔大埔墟崇德街13號
星期二休館 查詢電話：2653 3455

香港科學館*
香港九龍尖沙咀東部科學館道2號
星期四休館 查詢電話：2732 3232

香港視覺藝術中心
香港中區堅尼地道7A
星期二休館 查詢電話：2521 3008

羅屋民俗館
香港柴灣吉勝街14號
星期四休館 查詢電話：2896 7006

李鄭屋漢墓博物館
香港九龍深水埗東京街41號
星期四休館 查詢電話：2386 2863

油街實現
香港北角油街12號
星期一至上午10時至下午2時休館
查詢電話：2512 3000

三棟屋博物館
香港新界荃灣古屋里2號
星期二休館 查詢電話：2411 2001

上窰民俗文物館
香港新界西貢北潭涌自然教育徑
星期二休館 查詢電話：2792 6365

Dr Sun Yat-sen Museum*
7 Castle Road, Mid-Levels, Central, Hong Kong
Closed on Thursdays 查詢電話：2367 6373

Fireboat Alexander Grantham Exhibition Gallery
Quarry Bay Park, Hong Kong
Closed on Tuesdays 查詢電話：2367 7821

Flagstaff House Museum of Tea Ware
10 Cotton Tree Drive, Central, Hong Kong (inside Hong Kong Park)
Closed on Tuesdays 查詢電話：2869 0690

Hong Kong Film Archive
50 Lei King Road, Sai Wan Ho, Hong Kong
Closed on Tuesdays 查詢電話：2739 2139

Hong Kong Heritage Museum*
1 Man Lam Road, Sha Tin, New Territories, Hong Kong
Closed on Tuesdays 查詢電話：2180 8188

Hong Kong Museum of Art*
10 Salisbury Road, Tsim Sha Tsui, Kowloon, Hong Kong
Closed on Thursdays 查詢電話：2721 0116

Hong Kong Museum of Coastal Defence
175 Tung Hei Road, Shau Kei Wan, Hong Kong
（Closed for revamping）
查詢電話：2569 1500

Hong Kong Museum of History*
100 Chatham Road South, Tsim Sha Tsui, Kowloon, Hong Kong
（next to the Hong Kong Science Museum）
Closed on Tuesdays 查詢電話：2724 9042

Hong Kong Railway Museum
13 Shung Tak Street, Tai Po Market, Tai Po, New Territories, Hong Kong
Closed on Tuesdays 查詢電話：2653 3455

Hong Kong Science Museum*
2 Science Museum Road, Tsim Sha Tsui East, Kowloon, Hong Kong
Closed on Thursdays 查詢電話：2732 3232

Hong Kong Visual Arts Centre
7A Kennedy Road, Central, Hong Kong
Closed on Tuesdays 查詢電話：2521 3008

Law Uk Folk Museum
14 Kut Shing Street, Chai Wan, Hong Kong
Closed on Thursdays 查詢電話：2896 7006

Lei Cheng Uk Han Tomb Museum
41 Tonkin Street, Sham Shui Po, Kowloon, Hong Kong
Closed on Thursdays 查詢電話：2386 2863

Oil!
12 Oil Street, North Point, Hong Kong
Closed on Mondays from 10:00 am to 2:00 pm
查詢電話：2512 3000

Sam Tung Uk Museum
2 Kwu Uk Lane, Tsuen Wan, New Territories, Hong Kong
Closed on Tuesdays 查詢電話：2411 2001

Sheung Yiu Folk Museum
Pak Tam Chung Nature Trail, Sai Kung, New Territories, Hong Kong
Closed on Tuesdays 查詢電話：2792 6365

* 辦理「博物館通行證」申請及續證手續的博物館。
The museums which process "Museum Pass" application and renewal.

入場費

天象廳（適用於學校節目）

標準票：前座 24 元 後座 32 元

* 優惠票：前座 12 元 後座 16 元

（三歲以下兒童，恕不招待）

展覽廳

標準票：10 元 * 優惠票：5 元 團體票：7 元

- 團體票價為 20 人或以上於同日參觀的團體之標準票特惠價。
- 由攜票的成人陪同參觀的四歲以下小童免費入場。
- 逢星期三免費入場。
- 全日制學生或持有效博物館通行證者免費入場。

* 適用於殘疾人士（及一名同行照料者）及 60 歲或以上高齡人士，天象廳節目優惠票亦適用於全日制學生，享有優惠的人士可能會被要求出示有效的證件，以查核資格。

以下團體可申請豁免展覽廳入場費：

- 參觀人數達 20 人或以上並在香港註冊的幼稚園、小學、中學、專上學院、大學（提供補習班、商科、語文及電腦課程等教育課程的私立學校除外）及慈善團體或非牟利機構。
- 參觀人數達 10 人或以上並在香港註冊專為殘疾人士或長者服務的學校、慈善團體或非牟利機構。

書面申請需於參觀日期前最少兩星期提交。名額有限，先到先得。

團體訂票（天象廳學校節目）

（只供學校或相關非牟利團體申請）

- 訂票數目：最少 20 張 **
- 申請時間：可於參觀日期前一個月至三個月內提出申請。詳情請致電 2734 2720 查詢。

** 學校如申請觀賞學校節目，人數須達一百人或以上，本館才會接受申請；若人數少於一百人，本館會視乎同日有否其他學校提出申請，待總申請人數達一百人或以上，本館方會接受有關的申請。

售票處購票

預售一星期門票。

展覽廳及天象廳節目門票在香港太空館票房及其他城市售票處發售。（有關地點請見 <https://www.lcsd.gov.hk/tc/ticket/counter.html>）

網上購票：www.urbtix.hk

信用卡電話購票：2111 5999

票務查詢：3761 6661

Admission Fees

Space Theatre (Not applicable to School Show)

Standard Ticket: front stalls \$24 stalls \$32

* Concession Ticket: front stalls \$12 stalls \$16

(children under 3 years old will not be admitted)

Exhibition Halls

Standard Ticket : \$10 * Concessionary Ticket : \$5 Group Ticket : \$7

- Group Ticket rate is a special rate of Standard Ticket for groups of 20 people or more per visit.
- Free admission for children under 4 years old accompanied by an adult with a ticket.
- Free admission on Wednesdays.
- Free admission for full-time students or holders of valid Museum Pass.

* Applicable to people with disabilities (and one accompanying carer) and senior citizens aged 60 or above. Concessionary Ticket for Space Theatre show is also applicable to full-time students. Persons paying concessionary rate may be requested to produce a valid document for verification of eligibility.

The following organisations can apply for waiver of admission fees of Exhibition Halls:

- Kindergartens, primary schools, secondary schools, post-secondary institutions, universities (except private schools offering educational courses such as tutorial, commercial, language and computer courses) and charitable organisations or non-profit-making organisations registered in Hong Kong in a group of 20 visitors or more.
- Schools and charitable organisations or non-profit-making organisations registered in Hong Kong serving people with disabilities or senior citizens aged 60 or above in a group of 10 visitors or more.

Written application should be made at least 2 weeks before the date of visit and will be processed on a first-come, first-served basis subject to availability.

Group Booking (Space Theatre School Show)

(Only available to schools or relevant non-profit-making organisations)

- Minimum number of tickets to be booked: not less than 20 **
- When to apply: 1 to 3 months in advance of the day of visit. Please call 2734 2720 for details.

** Application for arrangement of School Shows by a school will be accepted if the number of participated students / teachers satisfies the minimum requirement of 100. In case there are less than 100 participants for an application, the Space Museum may arrange for a show at discretion if the total number of participants from all schools under application on the day exceeds 100.

Counter Bookings

Advance booking up to one week is available.

Tickets for Exhibition Halls and Space Theatre shows are available at the Space Museum Box Office as well as all URB TIX outlets. (For the addresses of outlets, please visit <https://www.lcsd.gov.hk/en/ticket/counter.html>)

Internet Booking: www.urbtix.hk

Telephone Credit Card Booking: 2111 5999

Ticketing Enquiries: 3761 6661

天象廳節目時間表 Space Theatre Show Schedule							
放映時間 Show Time	一 Monday	二 Tuesday	三 Wednesday	四 Thursday	五 Friday	六 Saturday	日及公眾假期 Sunday & PH
10:30 上午 am	學校節目 School Show	休館 Closed					
11:00 上午 am			學校節目 School Show			天象節目 Sky Show	天象節目 Sky Show
12:30 下午 pm						立體球幕電影 3D Dome Show	立體球幕電影 3D Dome Show
2:00 下午 pm	立體球幕電影 3D Dome Show	公眾假期除外 Except public holiday	立體球幕電影 3D Dome Show	立體球幕電影 3D Dome Show	立體球幕電影 3D Dome Show	全天域電影 OMNIMAX Show	全天域電影 OMNIMAX Show
3:30 下午 pm	全天域電影 OMNIMAX Show		全天域電影 OMNIMAX Show	全天域電影 OMNIMAX Show	全天域電影 OMNIMAX Show	天象節目 Sky Show	天象節目 Sky Show
5:00 下午 pm	天象節目 Sky Show		* 天象節目 Sky Show	天象節目 Sky Show	天象節目 Sky Show	立體球幕電影 3D Dome Show	立體球幕電影 3D Dome Show
6:30 下午 pm	* 立體球幕電影 3D Dome Show		立體球幕電影 3D Dome Show	* 立體球幕電影 3D Dome Show	立體球幕電影 3D Dome Show	* 全天域電影 OMNIMAX Show	全天域電影 OMNIMAX Show
8:00 晚上 pm	全天域電影 OMNIMAX Show		全天域電影 OMNIMAX Show	全天域電影 OMNIMAX Show	* 全天域電影 OMNIMAX Show	天象節目 Sky Show	* 天象節目 Sky Show

立體球幕電影 3D Dome Show	天象節目 Sky Show	全天域電影 OMNIMAX Show
穹蒼解密 3D Secrets of the Universe 3D 1.7.2021 – 31.3.2022	天外有天 Worlds Beyond Earth 1.7.2021 – 31.12.2021	古洞透天機 Ancient Caves 1.7.2021 – 31.3.2022

只限學校及相關非牟利團體預訂 School and relevant NGO booking only

- 凡節目有 * 符號者為英語場次，其餘為粵語場次。
 - 全天域電影、天象節目及立體球幕電影中，觀眾可透過多語言耳機系統選擇英語、粵語、普通話或其他外語（如有）。
 - 學校節目只供學校及相關非牟利團體申請。
- 節目如有更改，恕不另行通知。

香港太空館開放時間

Hong Kong Space Museum Opening Hours

星期一、三至五：下午 1 時至晚上 9 時

星期六、日及公眾假期：上午 10 時至晚上 9 時

星期二休館（公眾假期除外）

農曆年初一及二休館

聖誕前夕及農曆新年除夕提前於下午 5 時休館

Monday, Wednesday to Friday: 1:00 – 9:00 pm

Saturday, Sunday and public holiday: 10:00 am – 9:00 pm

Closed on Tuesdays (except public holiday)

Closed on the first two days of the Chinese New Year

Closed at 5:00 pm on Christmas Eve and Chinese New Year's Eve



惡劣天氣特別安排

Inclement Weather Special Arrangement

- Sessions marked with * are in English while other sessions are in Cantonese.
- Narration in English, Cantonese, Putonghua or other languages (if available) for OMNIMAX Show, Sky Show and 3D Dome Show can be selected with the multi-channel headphone system.
- School shows are available to schools and relevant non-profit-making organisations only.

All programmes are subject to change without prior notice.

太空館票房開放時間

Museum Box Office Opening Hours

星期一、三至五：中午 12 時至晚上 8 時 45 分

星期六、日及公眾假期：上午 10 時至晚上 8 時 45 分

星期二休館（公眾假期除外）

農曆年初一及二休館

聖誕前夕及農曆新年除夕提前於下午 5 時關閉

Monday, Wednesday to Friday: 12:00 noon – 8:45 pm

Saturday, Sunday and public holiday: 10:00 am – 8:45 pm

Closed on Tuesdays (except public holiday)

Closed on the first two days of the Chinese New Year

Closed at 5:00 pm on Christmas Eve and Chinese New Year's Eve



香港九龍尖沙咀梳士巴利道10號 · 10 Salisbury Road, Tsim Sha Tsui, Kowloon, Hong Kong

☎ 2721 0226 🌐 <https://hk.space.museum> ✉ hkspm@lcsd.gov.hk 📺 📱 📷 [hkspacem](https://www.hkspacem.com) 🔍