

SPECIAL EVENT

# MOONGAZERS

18-20 July 2019

#### SPECIAL EVENT

## MOONGAZERS

#### Thursday-Saturday, 18-20 July 2019

The Apollo 11 lunar landing on 20 July 1969 which brought humans onto the surface of the Moon for the first time has become a part of our global collective memory. Fifty years after the historical event, it continues to inspire scientists and engineers to explore space and look for ways to do the impossible.

On the occasion of the 50<sup>th</sup> anniversary of the first Moon landing, ArtScience Museum reflects on the significance of this groundbreaking journey which has defined a century with a three-day special event, *Moongazers*. This exuberant programme of performances, films, talks, displays and workshops celebrates human explorations and endeavours that bring about new scientific understandings of the world around us, and delves into our complex fascination with the Moon as a beacon, a timekeeper, and a nocturnal object of inspiration and wonderment.

Special Event: Moongazers is presented by ArtScience Museum in proud collaboration with:



















Special thanks to NASA Apollo Lunar Surface Journal for the archival videos of Apollo 11 mission.





Photo credit: Moonshadow Stories

# AL-DAMAR

Image credit: -wright Assembly

#### Performance

## In Love with the Moon by Kamini Ramachandran

Thursday-Saturday, 18-20 July 2019 | 7.30pm Age advisory: Content more suited for persons aged 15 years and above

The Moon has charmed and mesmerised many hearts throughout time. In folklore and myth, the Moon is a beloved, a sweetheart and a lover. Master storyteller Kamini Ramachandran shares her favourite moon myths seated beneath Luke Jerram's vast floating sculpture of the Moon.

#### Performance

#### Al-Qamar by -wright Assembly

#### Thursday, 18 July 2019 | 8.30pm

Art collective -wright Assembly presents *Al-Qamar* (Arabic: *The Moon*), a poetry-and-sound performance by poet and playwright Farhanah Diyanah in collaboration with performer, Mohammad Alhindwan (Sultan) and electronic artist and sound designer Syafiq Halid. Embedded in Islamic astronomy, the work expresses how the Moon, the Sun, and the Stars serve as a guide for Muslims to navigate their day-to-day activities during the night and day. Performed in Malay and Arabic with English translations.



Image credit: Kia

#### Performance

## Beyond the Silver Glow by nada & Kiat + Deborah Emmanuel (Syndicate.SG)

#### Friday, 19 July 2019 | 8.30pm

Syndicate.SG presents a music and movement performance in response to Luke Jerram's *Museum of the Moon*, surveying the diverse cultural, scientific and spiritual relations different societies have with the Moon.

As Jerram's Moon hangs passively while eliciting introspective responses from the individual viewers, *Beyond the Silver Glow* attempts to project these responses into the gallery environment. Inevitably, the scientific and the spiritual will collide, and common knowledge will have to confront conflicting emotions. The performance will explore these cycles of harmony and conflict further for the perennial tussle for what the Moon means to us.





Talk

## Taking Off: Singapore in Space

Friday, 19 July 2019 | 2-6pm Saturday, 20 July 2019 | 2.30-6.30pm

As Apollo 11 turns 50, we look back at the legacy of our first small steps on the Moon and look forward to the next giant leap. From astropreneurs and youth engineers to startup CEOs and advocates, hear from STEM figures who are leading the charge in Singapore's space technology industry. In this two-day programme of talks and panel discussions, we look at new technologies which are shaping the future of space, the importance of women in STEM, and what lies ahead for Singapore.

Featured speakers include Simon Gwozdz (CEO of Equatorial Space Industries), Mark Lim Jian Wei (CEO of Aliena), Marvyn Lim Seng (Project Leader of GoSpace.sg), Lim Wee Seng (Executive Director of Satellite Research Centre – NTU), Priyadarshini Majumdar (Space Strategist and Engineer at Astropreneurs HUB), Lynette Tan (Director of Singapore Space & Technology Association) and more.

Image credit: NASA

Workshop

## Operation: Moonshot by Astronomy.SG

Saturday, 20 July 2019 | 3-5pm, 7-9pm

Create Astrolabes to gauge the stars, then craft your own mini Apollo 11 rubber rocket and shoot for the Moon with expert guidance from the passionate youth astronomers of Astronomy.SG.



#### NASA Archival Videos of Apollo 11 Mission and Space Technology Displays

Thursday-Saturday, 18-20 July 2019 | All day

The 1969 Apollo 11 mission is brought to life through a multi-screen video installation comprising rare footage and Mission Control audio from the historic first moonwalk, courtesy of NASA Apollo Lunar Surface Journal. Highlights show Neil Armstrong describing his first impressions of the lunar surface and collecting surface samples, Buzz Aldrin descending the Lunar Module Eagle's ladder after commenting on the "magnificent desolution" of the Moon, and more.

A collection of exhibits on loan from Aliena, Astropreneurs HUB, Equatorial Space Industries, Satellite Research Centre - NTU and Singapore Space & Technology Assocation, ranging from new propulsion systems to mockup of suborbital rockets, demonstrates how Singapore is establishing itself as a force in the new space race.



Image credit: NASA

S R E C I A L E V E N T

# MOONGAZERS

Programme Schedule

## Thursday, 18 July

1	All day	NASA archival videos of Apollo 11 mission	Inspiration Gallery, Level 4
2 5	12pm, 2.30pm, 5pm, 7.30pm	Screenings of First Man as part of ArtScience on Screen: Moon Heroes film programme	Expression Gallery, Level 4
	7.30pm - 3.15pm	In Love with the Moon performance by Kamini Ramachandran	Museum of the Moon, L3 Galleries
	3.30pm - 7.30pm	Al-Qamar performance by -wright Assembly	Museum of the Moon, L3 Galleries

## Friday, 19 July

All day	NASA archival videos of Apollo 11 mission	Inspiration Gallery, Level 4
10am - 11.40am	Screenings of Mission Control: The Unsung Heroes as part of ArtScience on Screen: Moon Heroes film programme	Expression Gallery, Level 4

### Friday, 19 July

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AL AR	TAKING OFF: SINGAPORE IN SPACE - DAY 1 TALKS	Expression Gallery, Level 4
2pm - 2.30pm	The Moon Machine – Saturn V Rocket  Speaker: Simon Gwozdz (CEO and founder of Equatorial Space Industries)	
2.30pm - 3pm	Satellite 101 Speaker: Lim Wee Seng (Executive Director of Satellite Research Centre - NTU)	
3pm - 3.30pm	Propulsion Systems in Space: The Physics of the Technological Enablers for Enhanced Agility on Satellite Platforms  Speaker: Mark Lim Jian Wei (CEO and co-founder of Aliena)	
3.30pm - 3.45pm	Coffee/tea break	
3.45pm - 4.45pm	Video Showcase and Demonstration of Singapore Space Challenge projects Presenters: Singapore Space Challenge youth team representatives	
4.45pm - 5.30pm	One Giant Leap: Singapore's Youths Taking Small Steps to Become Space Crews  Moderator: Lynette Tan (Director and founding member of Singapore Space & Technology Association)	
5.30pm - 6pm	Lunar Lander Showcase and the Future of Human Spaceflight Speaker: Jonathan Hung (President of Singapore Space & Technology Association)	
7.30pm - 9.10pm	Screenings of Mission Control: The Unsung Heroes as part of ArtScience on Screen: Moon Heroes film programme	Expression Gallery, Level 4
7.30pm - 8.15pm	In Love with the Moon performance by Kamini Ramachandran	Museum of the Moon, Level 3 Galleries
8.30pm - 9.30pm	Beyond the Silver Glow performance by nada & Kiat + Deborah Emmanuel (Syndicate.SG)	Museum of the Moon, Level 3 Galleries

riginal image by NASA, ESA, A. Aloisi (STScI/ESA), and The Hubble Heritage (STScI/AURA)-ESA/Hubble Collaboration

## Saturday, 20 July

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All day	NASA archival videos of Apollo 11 mission	Inspiration Gallery, Level 4
10am - 12.30pm	Screenings of First Man as part of ArtScience on Screen: Moon Heroes film programme	Expression Gallery, Level 4
3pm - 5pm	Operation: Moonshot drop-in workshop by Astronomy.SG	Rainbow Room, Basement 2
	TAKING OFF: SINGAPORE IN SPACE - DAY 2 TALKS	Expression Gallery,
2.30pm - 3pm	A Singaporean Attempt at Launching into Space Speaker: Marvyn Lim Seng (Managing Director and founder of IN.Genius, project leader of GoSpace.sg)	Level 4
3pm - 3.30pm	<b>Democratising Access to Space</b> Speaker: Priyadarshani Majumdar (Space Strategist and Engineer at Astropreneurs HUB)	
3.30pm - 4.15pm	Armchair Conversation: Women in Space Speakers: Lynette Tan (Director and founding member of Singapore Space & Technology Association), Luo Sha (Lecturer in Department of Electrical & Computer Engineering at National University of Singapore)	
4.15pm - 4.25pm	Coffee/tea break	
4.25pm - 4.55pm	The Colours of the Universe: Satellites and Astrophysics Speaker: George-Cristian Potrivitu (Co-founder and S&T Advisor of Aliena)	
4.55pm - 5.25pm	It's Just Rocket Science – Singapore's Chance in the NewSpace Race	
Term of	Speaker: Simon Gwozdz (CEO and founder of Equatorial Space Industries)	

## Saturday, 20 July

E TOWN		
5.25pm - 6.25pm	A Chat with Experts: Singapore Needs More Space!  Panel Speakers: Victor Khoo (Senior Deputy Director in Land Survey Division of Singapore Land Authority), Mark Lim Jian Wei (CEO and co-founder of Aliena), Lui Pao Chuen (Advisor at National Research Foundation), Gillian Chin (Project Coordinator at Singapore Space & Technology Association)  Moderator: Bryan Lim (Space Enthusiast and Law student at King's College London)	
6.25pm - 6.30pm	The People's Moon  Presenter: Yvonne Lin (Assistant Director of Corporate Affairs at Singapore Space & Technology Association)	
7pm - 9pm	Operation: Moonshot drop-in workshop by Astronomy.SG	Rainbow Room, Basement 2
7.30pm - 8.15pm	In Love with the Moon performance by Kamini Ramachandran	Museum of the Moon, Level 3 Galleries
7.30pm - 10pm	Screenings of First Man as part of ArtScience on Screen: Moon Heroes film programme	Expression Gallery, Level 4
8:17pm - 8:30pm	Audio broadcast of Apollo 11 lunar landing	Museum of the Moon, Level 3 Galleries
8:30pm, 9pm, 9.30pm	Ethos Books audio story <i>Earthrise</i> by Li Hui Jia	Museum of the Moon, Level 3 Galleries

Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious.

Stephen Hawking



