



# TALK@MYSCHOOL PROGRAMME

We offer 35 science talks in 2020-21

*Informative talks will be delivered online  
with your school!*

## TOPIC HIGHLIGHTS

### Appearance and Evolution of Life

- Early Life on Earth
- The World of Dinosaurs



### Chemistry in Daily Life

- Weighing Proteins Using Mass Spectrometry

### Developments in Drugs and Medical Science

- Superbugs: What Doesn't Kill Them Makes Them Stronger
- Understanding Cancer
- Understanding COVID-19 and SARS-CoV-2

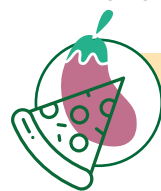


### Developments in Science and Technology

- Bacterial Extracellular Electron Transfer for a Sustainable and Renewable World
- Can Fantasy Become Reality
- How May Artificial Intelligence Change our Society?

### Ecology, Environment and Planet Earth

- Darwin in the City: Understanding Evolution in an Urban World
- Earthquakes and Tsunamis
- Noise Annoys: Understanding the Effects of Noise Pollution on Human and Non-human City Dwellers
- Revisiting Photosynthesis and Chloroplast Bioenergetics
- Scientific Health Risk Assessment of Persistent Organic Pollutants at Intensive Electronic Waste Recycling Sites
- The Anthropocene: Are we Causing the 6<sup>th</sup> Mass Extinction Event?
- The Earth is Round



### Food Sciences and Health

- Science of Food and Nutrition: What and Why We Eat

### Mathematics, Statistics and Decision Making

- Calculus! Why Should We Care?
- How Mathematics Improves the Quality of Our Life
- Interesting Things about Interest Rates
- Machine Learning
- Misuses of Statistics
- Role of Statistics in Health Sciences
- Statistics for Data Science
- Statistics in Mahjong
- The Mathematics of Voting
- What the Man Who Knew Infinity Knew

### Mysteries in Space

- Are We Alone: The Search for Planets Around Other Stars
- Cosmic Fireworks
- The Many Uses of Pulsars
- The Sun: Our Nearest Star
- The Violent Universe



### Science and Humanity

- The Forgotten Member of the Science Trinity

### Understanding the Physics of Nature

- The Four Nobel Prizes Associated with Neutrinos and Beyond
- The World of Particles

### Admission Talks for Our Science Programmes

- 6901 Bachelor of Science
- 6729 Bachelor of Science in Actuarial Science
- 6224 Bachelor of Arts and Sciences (Applied AI)

Our teacher will deliver an admissions talk to your school students introducing our science programmes. The talk will cover:

- key features of our science programmes
- the curriculum and diverse learning opportunities for students
- the Major/ Minor system
- the admissions policies

*Please visit our website for full list of topics and detailed descriptions. Submit applications for science and admission talks online.*



## Science Enrichment Programmes for Secondary School Students



### Junior Science Institute (JSI)

Inspiring STEM workshops for participants to embark on a journey of science exploration

### Talk@MySchool Programme

Interesting science talks covering a wide spectrum of disciplines will be delivered at secondary schools

### Public Lecture Series

Introducing and explaining frontier research findings in layman terms by Faculty academics

## Artificial Intelligence

- Artificial Intelligence Chatbots
- Can Artificial Intelligence be Creative?

## Biological Sciences

- Check Your Health
- Evaluate Your Meat
- Molecular Analysis of Genetically Modified (GM) Plants
- To See DNA Crossing and Exchanging

## Chemistry

- Science, Technology and Humans
- Weighing Proteins Using Mass Spectrometry
- What's the "Matter"?

## Earth Sciences

- Geological Heritage of Hong Kong

## Mathematics

- Calculus! Why Should We Care?
- Groups and Symmetry
- Probability in Daily Life
- Proof of the Four-Color Conjecture

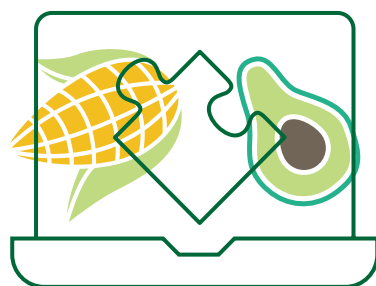


20 online workshops will be offered in first and second semesters of 2020-21

# JUNIOR SCIENCE INSTITUTE

## Interactive Online Lectures

- STEM topics covering a wide spectrum of disciplines
- Learning STEM through our interactive online workshops, demonstrations and virtual field trips!



## Physics

- How Does an Astronomical Telescope Work?
- Magnetism in Motion
- Nuclear Physics — Fundamental to Applied Science
- The Two-sphere Model of the Universe
- The Wonderful World of the Quantum

## Statistics & Actuarial Science

- Probabilities and Statistics in Daily Life

### Date

November 14, 2020 (Saturday)  
March 13, 2021 (Saturday)

### Application

Submit applications online

### Application deadline

1<sup>st</sup> semester session: November 8, 2020 (Sunday)  
2<sup>nd</sup> semester session: March 7, 2020 (Sunday)

### Eligibility

Form 4 – 6 (secondary school students)  
Year 11–13 (international school students)

# PUBLIC LECTURE SERIES

## Biological Sciences

The Magic of Oysters and How They Help Humans

## Chemistry

Chemistry Drives Little World - How Nanorobot May Work in Reality

## Earth Sciences

Origins of the Galápagos Archipelago's Land Animals: A Detective Story Involving Ocean Currents, DNA, Molecular Clocks, Volcanoes, and Tectonic Plates

## Mathematics

The Mathematics of Sharing

## Statistics & Actuarial Science

AI-Driven Diagnosis with COVID-19  
How Can Data Science Reshape the Global Value Chain Across Countries?

## Physics

Big Data in Astronomy

Stay tuned for lecture dates!

