

At The University of Hong Kong



Dialogues in Science and Faith

Conference Program

5th - 6th May 2018

Jao Tsung-I Academy 800 Castle Peak Road Lai Chi Kok Hong Kong



About the Conference

When you work as a scientist, and you have a religious faith, there is an assumption somewhere that scientific beliefs and practices can be reconciled with religious beliefs and practices. Often, this assumption is never really inspected: some may be too busy just getting the results in; others may be worried that they might not like what they find; still others simply don't know where to start. This two-day conference provides an opportunity to take a pause from the bustle of Hong Kong life, to unpack, inspect, and discuss that assumption. In doing so, it is anticipated that we will enrich our views of both science and faith.

In reflecting upon how science and religion relate, the conference brings together practicing scientists, engineers, and theologians from across South East Asia and beyond who have an interest in the dialogue between science and religion. We welcome those who have little prior experience of such dialogue, as we welcome those who have been engaged with it for decades.

The conference is organised by way of a collaboration between the Faith and Science Collaborative Research Forum and the Faraday Institute for Science and Religion.

The Faith and Science Collaborative Research Forum

The Faith and Science Collaborative Research Forum (FaSCoRe) seeks to foster fruitful interactions between science and religion within Hong Kong academia. Based at the University of Hong Kong, it works with academics from across Hong Kong, drawn from natural, social, and medical sciences, engineering, theology and philosophy. By cultivating interdisciplinary discussions, we aim to facilitate a process of mutual transformation by which religion can enrich science and science can enrich religion.

The Faraday Institute for Science and Religion

The Faraday Institute for Science and Religion is an academic research enterprise based at St Edmund's College, Cambridge. The Institute has four main activities:

- Scholarly research and publication on science and religion, including the organisation of invited groups of experts to write joint publications.
- To provide short-term courses in science and religion.
- To organise seminars and lectures on science and religion.
- To provide accurate information on science and religion for the international media and wider public.

The Faraday Institute has a Christian ethos, but encourages engagement with a wide diversity of opinions concerning interactions between science and religion, without engaging in advocacy. It aims to provide accurate information in order to facilitate informed debate.

FAITH AND SCIENCE

COLLABORATIVE RESEARCH FORUMAt The University of Hong Kong



The Faraday Institute for Science and Religion

Dialogues in Science and Faith 5th - 6th May 2018 - Schedule -

Day 1

09:00	Registration opens.
09:30	Welcome – Prof Pauline Chiu (HKU, Chemistry)
09:45	Talk 1: "The History and Future of Science and Faith"
	Dr Clinton Ohlers (HKU, History)
	Response – Dr Denis Alexander (Cambridge, Biology)
10:50	Coffee
11:20	Feedback from the coffee break
11:25	Talk 2:"When the Truth Sets You Free"
	Dr Mike Brownnutt (HKU, Physics)
	Response – Prof Russell Cowburn (Cambridge, Physics)
12:30	Lunch
13:30	Impression: "Untimely Meditations"
	Dr Kenneth Ng (HKU, Chemistry)
13:35	Talk 3: "Integrating Science and Faith in the World of Physics"
	Prof Russell Cowburn (Cambridge, Physics)
14:45	Coffee
15:15	Impression: "Christian Thinking and Character in Science"
	Ms Anita Li (HKU, Medicine)
15:30	Talk 4: "Tales from the Faraday Institute: reflections on life in science and religion"
	Dr Denis Alexander (Cambridge, Biology)
16:30	Breakout session 1: "Obstacles and Opportunities"
17:15	Panel discussion: "Making Opportunities Into Reality"
18:00	End of formal activities for Day 1
19:00	Conference dinner
21:00	Meet the speakers (in the bar)

FAITH AND SCIENCE COLLABORATIVE RESEARCH FORUM

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The Faraday Institute for Science and Religion

Day 2

08:00	Breakfast
09:00	Impression: "The Challenges and Opportunities of Bringing Students to Church"
	Dr Leanne Chan (City U, Electronic Engineering)
09:15	Talk 5: "Mass Extinctions, Extra-terrestrials, and Other Evolutionary Myths"
	Prof Simon Conway Morris (Cambridge, Earth Sciences)
10:15	Coffee
10:30	Breakout session 2: "How Then Shall We Live?"
11:30	Talk 6: "Reflections on Science and Faith:
	connecting the origin of life and the origin of the universe"
	Prof Stephen Tsui (CUHK, Biomedical Sciences)
12:30	Reflection (optional)
13:00	Lunch

- 13:45 Closing remarks Dr Mike Brownnutt (HKU, Physics)
- 14:00 End of formal activities for Day 2
- 14:30 Guided tour of the Jao Tsung-I Academy (optional)

Title:The History and Future of Science and FaithSpeaker:Dr Clinton OHLERS

Faith and Global Engagement, University of Hong Kong



R. Clinton Ohlers earned his PhD in Intellectual History, focusing on History of Science, from the University of Pennsylvania, where he also served as a lecturer on science and religion. He has been a Henry Research Fellow with the Templeton-funded Creation Project at Trinity International University where he worked on understanding the origins of perceptions of conflict between science and religion. He has completed a book manuscript on that topic, under the working title of The Birth of the Conflict Between Science and Religion. He is now a Research Assistant Professor at the University of Hong Kong, working with Faith and Global Engagement and the Faith and Science Collaborative Research Forum. His current research focuses on understanding divine action in light of modern science.

Abstract:

The history of the relationship between science and faith is complex. In the early years of the history of science as a scholarly field, what is known as the "conflict thesis"—the idea of perpetual, inevitable, and necessary conflict between science and religion—dominated historians' understanding of the past. Today, belief in such conflict dominates the popular imagination in spite of over a half-century of concerted effort by historians to discard the thesis as a historical fiction from its start. Nevertheless, the conflict thesis looms large. In addition, the role of faith also looms large, not only religious faith, but also faith in a variety of conceptions of reality to which the natural sciences are often marshaled for support. Adding further complexity, science as a form of enquiry can be compared with and contrasted to other means of knowing real truths.

Therefore, this talk examines important interludes and figures in the history of science and religion to better understand this complexity. It also considers the widespread belief in the conflict thesis as not merely an obstacle to a better understanding of the two realms, but as a useful guide to determining where the most critical areas of concern lie, and how these may indicate pathways forward to a more fruitful future of engagement between science and religion.

Title: When the Truth Sets You Free

Speaker:

Dr Mike BROWNNUTT

Faith and Science Collaborative Research Forum, University of Hong Kong



Mike Brownnutt obtained his first Master's degree (MSci in physics) and his PhD (in experimental quantum mechanics) from Imperial College London. Following this he moved to Innsbruck, Austria, for eight years, firstly as a post-doctoral researcher and later as an Assistant Professor, developing scalable architectures for quantum computers. Throughout this work he has had an abiding interest in the relationship between science and religion. He completed his second Master's degree (MA in theology from the University of Chester) considering how "faith" is understood by various parties in discourse on the relationship between Christianity and science. Now living in Hong Kong, he is Associate Director of the Faith and Science Collaborative Research Forum.

Abstract:

Scientific research is a pursuit of truth. All truth is God's truth. And the truth will set us free. This looks like a neat justification for Christians being involved in science. However, if only Jesus can set us free, there is clearly a richness to truth that this simple account misses. One cannot make a straight switch between what science means when it talks about truth, and what Christianity means. Recognising the differences between these conceptions of truth allows us to ask new questions about what kind of truth sets us free, and what academic freedom might then look like if scientists found it. This back and forth exchange of ideas serves to enrich our view of faith as well as our view of science.

Title:Integrating Science and Faith in the World of PhysicsSpeaker:Prof Russell COWBURN

Department of Physics, University of Cambridge



Russell Cowburn FRS is a Professor of Experimental Physics at the Cavendish Laboratory, University of Cambridge. He was elected a Fellow of the Royal Society in 2010. He has had over 60 patents granted in connection with his research, is the founder of two startup companies and the inventor of the anti-counterfeiting technology Laser Surface Authentication.

His current research projects cover work on nanoscale magnetism and spintronics. Applications of this basic research include low-energy computer chips, ultrahigh-density 3-dimensional data storage, and healthcare devices. He is interested in bringing ideas from applied physics through technology to commercialisation. At the start of his professional life, he had thought he faced a choice between a "spiritual" career and a "material" one. Several decades on, he is convinced that the separation is not as clear may have initially appeared.

Abstract:

It is a statistical fact that many practicing scientists are also people of faith, demonstrating that these two spheres of reality are certainly not incompatible. But can integration between science and faith go beyond simple compatibility? Can science inform our faith and can faith assist our science? In this talk, I describe my experience – as a professional academic physicist and practicing Christian – of areas where I have found strong integration between science and faith to be both possible and beneficial. Specifically, I will discuss the role that physics has to play in providing empirical input to theological questions such as how did the universe begin, is there a creator, what is his nature, and how can we deepen our worship of him? I will also discuss ways in which I have found Christian faith to motivate and assist my physics research.

Title:Tales from the Faraday Institute: reflections on life in science and faithSpeaker:Dr Denis ALEXANDER

Faraday Institute for Science and Religion, University of Cambridge



Denis Alexander is the Emeritus Director of The Faraday Institute for Science and Religion, St Edmund's College, Cambridge, where he is a Fellow. He was previously Chair of the Immunology Programme and Head of the Laboratory of Lymphocyte Signalling and Development at The Babraham Institute, Cambridge. He has many years' experience of being known both as a scientist and as a Christian, and notably as an academic who will actively pursue fruitful engagement between science and religion.

Abstract:

The Faraday Institute, now with 21 staff, was founded in January 2006 as part of St Edmund's College, Cambridge University. It has the aim of creating an academic enterprise within which research and dissemination activities might be carried out in order to build positive interactions between science and religion. High-level academics

have been involved since the Institute's founding, including the first Chair of the Advisory Board, Prof Sir Brian Heap FRS, formerly Master of St Edmund's College, Cambridge, and Vice-President of the Royal Society; and co-founder and present Director, Prof Bob White FRS, Professor of Geophysics at Cambridge, who this year was awarded the Gold Medal of the Royal Astronomical Society.

Over the last four years (2014-2017) publications by The Faraday Institute have included 34 academic books and peer-reviewed papers on a wide variety of topics within the field of science and religion. The research is carried out predominantly by post docs within Cambridge University departments. Current research projects include 'Mystical Seizures and Salience in Temporal Lobe Epilepsy' (Dept. of Medicine); 'Human Identity in the Age of Nearly Human Machines' (Computing Laboratory); and 'Transcending the Dimensions' (Cavendish Laboratory).

This talk will reflect on the challenges and opportunities involved in nurturing the academic discourse between science and religion. In particular, it will highlight some of the insights and lessons learnt from the first 12 years in the life of the Faraday Institute.

Title:Mass Extinctions, Extra-Terrestrials, and Other Evolutionary MythsSpeaker:Prof Simon CONWAY MORRISDepartment of Earth Sciences, University of Cambridge



Simon Conway Morris FRS holds an ad hominem Chair (in Evolutionary Palaeobiology) in the Earth Sciences Department in Cambridge University, where he is also a Fellow of St John's College. He was elected a Fellow of the Royal Society in 1990, and has received numerous awards including, in 1998, the Lyell Medal of the Geological Society of London.

A world expert on the Cambrian Explosion, his research considers the constraints on evolution, and the historical processes that lead to the emergence of biological complexity. Such work is central to palaeobiology, but is also of significance to biologists and bioastronomers, as well as the wider community. He is developing wider research interests across the entire field of evolution, including the question of animal cognition (including numerosity) and extra-terrestrial life.

Abstract:

All sciences have fundamental assumptions that on a day to day basis need no examination. Occasionally, however, a tour of the foundations is sensible, making sure all is in order and that received wisdom is unchanged. On such a tour, however, alarming cracks may be discovered, 'myths' that need re-examination. Do mass extinctions really radically re-direct the course of evolution? Given extra-terrestrials certainly exist, why are they so shy? Dogs bark and lions growl, but why does neither asks what's in the newspaper? Simple questions, difficult answers.

Title: Reflections on Science and Faith: connecting the origin of life and the origin of the universe

Speaker: Prof Stephen TSUI

School of Biomedical Sciences, The Chinese University of Hong Kong



Stephen Kwok-Wing Tsui is currently a Professor in the School of Biomedical Sciences, the Head of Division of Genomics and Bioinformatics and the Director of Hong Kong Bioinformatics Centre of The Chinese University of Hong Kong (CUHK). Having taught in a high school for six years, he quit his job in 1992 to study for an MPhil at CUHK. After receiving his PhD in biochemistry at CUHK, he was appointed as an Assistant Professor and then Full Professor in Biochemistry in 2004. He is a former member of the International HapMap Consortium and worked on the single nucleotide polymorphisms of human chromosome 3p. During the SARS outbreak in 2003, his team was one of the first teams to crack the complete genome of the SARS-coronavirus and reported the genome evolution during the viral spread. He is now studying the genome evolution of amphioxus, which is a well-known living

fossil. After finishing his Master of Christian Studies at the China Graduate School of Theology, he is now a part-time Master of Science student in Philosophy, Science and Religion at the University of Edinburgh.

Abstract:

The origin of life and the origin of the universe seem to be two unrelated disciplines in biology and physics, respectively. Although the universe is too big to be fully explored, and the molecular world is too complicated to be precisely comprehended, their origins may have some common characteristics because they originated from the same creator. Is there any crosstalk between the big bang theory and biological evolution? Or between speciation and galaxy formation? As a molecular biologist and a genome evolution scientist, I will present a preliminary trial to connect these two origins.

Dialogues in Science and Faith Impulse Talks

Title: Untimely Meditations Speaker: Dr Kenneth NG Department of Chemistry, University of Hong Kong



Kenneth Ng received his MSc and PhD degrees from the University of Cambridge. Under the guidance of Prof Ian Paterson he performed research on total syntheses of bioactive natural products, during which he developed his passion in synthetic organic chemistry. After spending ten years in the UK, he moved back to Hong Kong for a change and dived into the field of Chemical Biology. He is currently an assistant research officer under the supervision of Prof Dan Yang in the University of Hong Kong, investigating the interplay between glycolipids and the immune system.

Title:Christian Thinking and Character in ScienceSpeaker:Ms Anita LIFaculty of Medicine, University of Hong Kong



Anita Li is a PhD candidate at the University of Hong Kong in the Faculty of Medicine. She is focusing on the use of Mesenchymal Stem Cell as a therapy for Neuroblastoma. Previously, she completed a degree in Biochemistry from King's College London. She moved to Hong Kong for her PhD and during this time she has become a mentee in the Graduate Mentorship Program organised by the Faith and Science Collaborative Research Forum. This also provided her the opportunity to attend the Developing a Christian Mind conference held in Oxford in March this year.



Title:The Challenges and Opportunities of Bringing Students to ChurchSpeaker:Dr Leanne CHANDepartment of Electronic Engineering, City University of Hong Kong



Leanne Chan is an Assistant Professor of Electronic Engineering. She earned her undergraduate degree in electrical and electronic engineering at the University of Hong Kong. She obtained her MS and PhD degrees in electrical engineering and biomedical engineering respectively from University of Southern California, Los Angeles, United States. Following two years of postdoctoral work at the Developmental Neuroscience Program of the Saban Research Institute, Children's Hospital of Los Angeles, she joined the faculty of the City University of Hong Kong in December 2011. Dr Chan is a senior member of the IEEE Society. She is a member of the Society of Neuroscience and the Engineering in Medicine and Biology Society (EMBS). Her research interests include retinal prosthesis, visual electrophysiology in vivo, neuromodulation of electrical stimulation, and computer vision.



Breakout Session 1 Obstacles and Opportunities

In your groups, discuss the following questions.

- Q1) What are the biggest obstacles you face with relating science and religion?
- Q2) To what extent are the issues around these obstacles based in reality, and to what extent are they based in people's perception?
- Q3) How might these obstacles be overcome?
- Q4) What is the biggest opportunity you see for the interaction of science and religion?

Should you be willing to share the results of this discussion with the conference organisers, these will undoubtedly provide a mine of ideas for future activities relating to science and religion in Asia. Feel free to take a photo of your notes and sent it to Katy Mok (<u>kytmok@hku.hk</u>).



Breakout Session 2 How Then Shall We Live?

In your groups, discuss the following question.

Q1) How will what have you learned at this conference change what you do in the coming semester?

Should you be willing to share the results of this discussion with the conference organisers, these will undoubtedly provide a mine of ideas for future activities relating to science and religion in Asia. Feel free to take a photo of your notes and sent it to Katy Mok (kytmok@hku.hk).

History of the Venue

The Jao Tsung-I Academy is named after the great scholar, Jao Tsung-I (1917-2018). In a life that ended only this February and spanned just over a century, Jao Tsung-I was one of the greatest autodidacts in modern history, and likely history's very last. Jao Tsung-I devoted himself to the the pursuit of excellence in two worlds: the academic and artistic. In academia, Jao Tsung-I has pursued research with a passion that few have equalled. His motto was to "Seek the Truth, Seek the Standard, and Seek the Justness". He pioneered research on the Dunhuang Manuscripts (now known as "Dunhuangology") and in Chaozhou Studies. His research covered 13 genres, spanning the entire field of Chinese culture including ancient history, oracle bone inscriptions, and chuci. A prolific writer, Jao Tsung-I authored over 900 scholarly articles. He is often mentioned alongside renowned scholar and artist Ji Xianlin, as "Jao of the South and Ji of the North". As in his academic work, Jao was an artist whose talents spanned and brought together many disciplines. His literary writings, calligraphy, and paintings blend classical traditions and innovation. His poetry, while complying with traditional schematic rules, is contemporary in essence. His calligraphy was not confined by any particular style, and he created his own unique oracle bone palaeographic form of the art. His paintings are vibrant yet simple, full of variation and bold innovation.

The historic mountainside venue in Lai Chi Kok, Hong Kong, is itself over 130 years old and the site of multiple transformations. Originally the site was next to the sea, prior to reclamation of the area around Mei Foo and Lai Chi Kok. In the late 19th century, the government of the Qing dynasty set up a customs station at this location. In the early 20th century, the British built dwellings for Chinese Labourers, leaving behind the earliest buildings on the site. Subsequently, the site successively served as a quarantine station, a prison, a hospital for infectious diseases, and a psychiatric rehabilitation centre. Though it has served different roles and performed different functions at different times, the complex has been able to adapt to whatever society needed at that time. The Jao Tsung-I Academy is currently one of the first projects under the Hong Kong Government's "Revitalizing Historic Buildings through Partnership" Scheme of the Development Bureau of the HKSAR Government.



Travelling to the Venue

By MTR

10 minutes' walk from Mei Foo MTR Exit B (West Rail Line and Tsuen Wan Line), 10 minutes' walk from Lai Chi Kok MTR Exit C (Tsuen Wan Line).

By bus

KMB bus No. 31B, 32, 35A, 36B, 40 or 286X. Alight at the Jao Tsung-I Academy stop.

Shuttle bus between MTR stations and Heritage Lodge

Free shuttle bus services between the Jao Tsung-I Academy, Heritage Lodge, Lai Chi Kok MTR Station and Mei Foo MTR Station are available from 9:15 a.m. to 9:45 p.m. daily.

For more information, see JTIA website for shuttle bus timetable. (Home > About Us > Contact Us > Location and Access)

Car parking

Please note that parking space is not available at the Jao Tsung-I Academy.

There are a few car park services nearby (within 10 minutes' walk from JTIA):

- (1) indoor car park at 9 Po Lun Street
- (2) indoor car park at Manhattan Hill
- (3) Wilson Parking at Mei Foo Sun Chuen



Connections

The materials from the conference will be available online on the FaSCoRe website http://faithandscience.hku.hk/events/workshops/dialogues-in-science-and-faith-1.html

You can check out future activities of the Forum at http://faithandscience.hku.hk/

If you would like to be added to the FaSCoRe mailing list and be kept up to date with all that is going on, please e mail a request to Katy Mok (kytmok@hku.hk).

You can check out future activities of the Faraday Institute at <u>https://www.faraday.st-edmunds.cam.ac.uk/</u>

If you would like to be added to the Faraday Institute's mailing list and be kept up to date with all that is going on, please e mail a request to Rachel Simonson (<u>rs682@cam.ac.uk</u>).

Main Event Sponsor

Templeton World Charity Foundation, Inc. (TWCF) www.templetonworldcharity.org

Additional sponsorship kindly provided by

Professional and Educational Services International (PESi) www.pesintl.com





Where Things Are

Day 1

Talks:	Block I
Coffee:	Block G (Workshop Cafe)
Breakout:	Block I & Block G (Rm. 2&4)
Meals:	Block H (Top Floor)
Hotel check in:	Block C

Day 2

Talks:	Block G (Rm. 2&4)
Coffee:	Block G (Workshop Cafe)
Breakout:	Block G (Rm 2&4) & Block K (Conference Room)
Breakfast:	Block G (Workshop Cafe)
Lunch:	Block G (Rm. 2&4)



