



*foundation for*  
CULTURAL RENEWAL



# Detailed Agenda and Speaker Information

## DAY 1: OCTOBER 31, 2024

9:30 AM – 11:00 AM

REGISTRATION

Location: 1<sup>st</sup> floor Lobby

11:00 AM – 11:30 AM

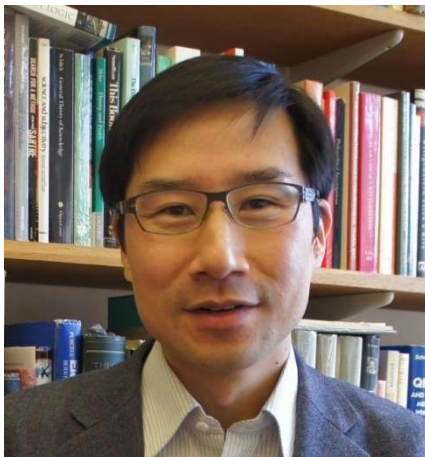
WELCOME

Location: Learning Lab

11:30 AM – 12:30 PM

Title: [Past-Forward: Renewing Science through History](#)

Location: Learning Lab



**Prof. Hasok Chang (Keynote)**

Hasok Chang is the Hans Rausing Professor of History and Philosophy of Science at the University of Cambridge, and a Fellow of Clare Hall. Born and raised in South Korea, he received his higher education in the US. He taught for 15 years at University College London, after receiving his PhD at Stanford University following an undergraduate degree at CalTech. He is a co-founder of the Society for Philosophy of Science in Practice (SPSP), and also the Committee for Integrated History and Philosophy of Science. He served as the President of the British Society for the History of Science from 2012-2014.

Modern scientific research usually happens in a pre-ordained way: well-trained scientists focusing their efforts in the most promising direction of research as dictated by the orthodoxy in their field. However, a broader and longer-term look at the history of science shows that progress happens in multiple unexpected directions that are difficult to predict or control. The history of science is a large storehouse of forgotten facts and ideas, and abandoned directions of research that may be worth revisiting. I will illustrate these ideas with two examples from my own work: the anomalous boiling of water widely reported and accepted in the 18th and the 19th centuries, and the quandaries that emerge when we consider the mechanisms behind the phenomena of static electricity and atmospheric electricity. Engagement with such topics give rise to a mode of work that I have called “complementary science,” which uses historical and philosophical perspectives to tackle scientific questions that are not being addressed by current specialist scientists.

**12:30 PM – 1:30 PM**

LUNCH (boxed)

Location: Learning Lab foyer, lobby, cafeteria area

**1:30 PM – 2:30 PM**

**Title: Foundation of Gravity: Dissecting Newton's *Principia***

Location: Learning Lab

**Dr. Gopi Vijaya**



Dr. Gopi Krishna Vijaya is from Bangalore, India. He has completed his undergraduate physics training from the Indian Institute of Technology Kanpur (India), and his PhD in Physics (Solar Energy) from the University of Houston in 2014. He is the current Science Director of the Foundation for Cultural Renewal. His research background is in experimental and theoretical semiconductor physics, solar energy, and foundational studies in gravitational theory, astronomy as well as the theory of color.

Isaac Newton's *Principia* serves as the foundational work for mechanics and particularly celestial mechanics and astronomy. It has had repercussions into all of modern physics, and also forms the basis for Einstein's theories. But what can we discover when we take a fresh look at the *Principia* and re-derive

mathematical the relationships in this work? Are there errors left unaddressed that open up new avenues for fundamental research? Do Newton's formulae pass the conceptual and mathematical consistency checks that we can apply today? This talk will explore these ideas and also provide an unexpected new foundation for gravity and circular motion.

**2:30 PM – 3:30 PM**

Title: **How Does A Battery Work? Complementary Electro-Chemistry**

**Prof. Hasok Chang**

Location: Learning Lab

Early research on batteries produced many questions that were never completely answered, and a profusion of interesting phenomena. Many phenomena have been forgotten and can be recovered with benefit, as I will illustrate by recreating Silvester's silver tree from 1806. Investigating the recovered phenomena also gives rise to new facts and questions, as with my discovery of the solution of gold in salt water using two AA batteries. There was a great controversy concerning the mechanism of batteries, between Volta's own "contact theory" attributing the generation of electricity to the contact between different metals, and the "chemical theory" focusing on the chemical reaction between metals and electrolytes. The chemical theory was victorious in the end, but not in a completely satisfactory way. Following the loose ends left in this history leads to a modest research program that I call "contact chemistry," investigating how a metal changes its chemical behavior when it is in contact with another metal.

**3:30 PM – 4:00 PM**

COFFEE BREAK

Location: Learning Lab foyer, lobby, cafeteria area

**4:00 PM – 5:30 PM**

Title: **What is the role of Thinking, Intuition and Morality in the Age of A.I.?**

Location: Learning Lab

**Panel led by Gary Lamb, Andreas Schmitt**



### **Gary Lamb**

Gary Lamb is currently the director of the Hawthorne Valley Center for Social Research and its Ethical Technology Initiative. Over his 36 years of employment at Hawthorne Valley, Gary also served the Farm Store manager, school development and admissions director, and high school economics teacher. His professional background includes a degree in civil technology and mathematics, and employment in the fields of building construction, medical technology, and manufacturing.



### **Andreas Schmitt**

Andreas Schmitt is from Germany. He is the founder and head of the “Annual Training Philosophy of Freedom”, a worldwide schooling path of thinking, intuition and inner freedom. Besides that, he is a specialist in visceral surgery, Scientific Assistant at the University Hospital of Tübingen, Functional Senior Physician (Centre for Integrative Oncology Filderlinik) and a GAÄD anthroposophic physician. He has lectured on a variety of topics, including Philosophy and the real capacity of human thinking.

The wave of generative AI and social media has swept over society and given us access to powerful tools, and every day we hear comparisons between human and machine capacities. Is there an objective way to judge the capacity of the machine and the role of human thought and creativity? Are there limitations or boundaries to both? What are the institutional motives behind the use of this technology, and what are the moral considerations that play into it? The panel discussion will explore these ideas through an interactive session with the audience as well.

## DAY 2: NOVEMBER 1, 2024

**8:30 AM – 9:30 AM**

BREAKFAST

Location: 2<sup>nd</sup> Floor Lobby

**9:30 AM – 10:30 AM**

Title: **Polarity in Goethean Color Theory and its modern verification**

Location: Hahn Auditorium



**Dr. Matthias Rang**

Matthias Rang (PhD, U. Wuppertal) studied physics in Freiburg and Berlin before becoming a visiting researcher in the field of nano-optics at the University of Washington, Seattle. At the Goetheanum in Dornach, Switzerland, where Rang co-leads the Natural Science Section, he carries out research on Goethe's theory of color in relation to physical optics. His exhibition on color has taken place in Stourbridge (UK), Basel and Dornach (Switzerland), Ytterjarna (Sweden), and Berlin (Germany).

Goethe's observations on color pointed to a way of looking at the color spectrum with far-reaching philosophical, physical and practical ramifications. We will examine the polarity of light and shadow, as well as between the spectrum of Newton and the polar opposite spectrum pointed out by Goethe. The riddle of the color magenta in the spectrum will be explored, along with recent experiments that show the polarity in thermal properties of the spectrum as well. Concepts that will be introduced in this talk will be further demonstrated in the live exhibit.

**10:30 AM – 11:30 AM**

EXHIBIT TIME + COFFEE (COLOR)

Location: Hahn Auditorium, Lovelace, and Lobby

**11:30 AM – 12:30 PM**

Title: **Polarity in Electromagnetism and its relation to pressure**

Location: Hahn Auditorium



## Mitko Gorgiev

Mitko Gorgiev is from Skopje, Macedonia, and he has studied electrical engineering at the Cyril and Methodius University of Skopje. His scientific explorations began with the study of Goethe's works on light and colors "Contributions to Optics" which he translated into Macedonian while accompanying it with experiments. He has also accomplished experimental work in electromagnetism by studying the full range of polarities of positive and negative electricity, and the relationship of this to the polarities in color and other areas of physics.

We have learned about electricity mainly in terms of positive and negative charges, but electric current is mainly seen as the motion of negative charges. How do we obtain a dynamic understanding of electromagnetism, which incorporates the polarity of pressure and suction at multiple levels? How can we relate the electromagnetic forces to the mechanical forces of resistance and elasticity? This talk will explore, with experimental details, a different view of the relation between electricity and magnetism.

**12:30 PM – 1:30 PM**

LUNCH (boxed)

Location: 2<sup>nd</sup> floor Lobby

**1:30 PM – 2:30 PM**

Title: **The TYCHOS, Our Geo-axial Binary System**

Location: Hahn Auditorium



## Simon Hytten

Simon Hytten is a Swedish graphic designer, photographer and musician based in Italy. His recording studio was, at one time, a hub for a wide variety of international artists. Drawing on his experience as a graphic designer and musician, he has re-examined the history of astronomy, especially focusing on the struggle with Mars by Tycho Brahe and Johannes Kepler, that has enabled him to develop an astronomical model called the TYCHOS.

The Tychos is a geoheliocentric model of our solar system based on that devised by Tycho Brahe and his assistant Longomontanus. It proposes that the Sun and

Mars, each escorted by two moons, constitute a binary pair orbiting around the Earth which itself revolves around a 25344-year-long orbit. A digital simulator, the Tychosium, is currently being developed as 'proof of concept'; although it features all our system's bodies moving at constant speeds around uniformly circular orbits, it is already in very good agreement with astronomical observations. More significantly, the Tychos resolves a number of geometric and physical aberrations that afflict the standard heliocentric model.

**2:30 PM – 3:30 PM**

Title: **Understanding Life and its Evolution**

Location: Hahn Auditorium



**Prof. Dr. Christoph Hueck**

Christoph Hueck, born 1961, studied biology and chemistry, doctorate in bacterial genetics (University of Erlangen-Nuremberg, 1994), basic and applied molecular biology research in Germany and the USA (Harvard, UC San Diego, UW Seattle, University of Würzburg, Creatogen Biosciences GmbH Augsburg, 1990-2002), class teacher at a Waldorf school in Upper Bavaria (2003-2008), lecturer at the Free University of Stuttgart (2008-2015), where he was professor of life sciences. Since 2015, he is a principal investigator and lecturer with Akanthos Academy, Stuttgart.

Why it is important to overcome biological materialism – and how it is possible. Materialistic science tells us that we are accidental products of a blind evolution, that our life is controlled by genes, and that our brains work like computers. However, at the forefront of science, these doctrines are being heavily questioned. In biology, a Kuhnian revolution is on the horizon, which means a completely new understanding of life, its evolution, and our position in nature. The lecture will discuss some of these questions and outline an alternative understanding of life and evolution with the help of exhibits of human and primate skeletons.

**3:30 PM – 4:30 PM**

EXHIBIT TIME + COFFEE (EVOLUTION)

Location: Hahn Auditorium, Boole, and Lobby

**4:30 PM – 6:00 PM**

**Title: Identifying Morphological Patterns in Mammals based on Principles of Polarity, Threefoldness, and Recursion**

Location: Hahn Auditorium



**Prof. Mark Riegner**

Mark Riegner has a PhD in Ecology and Evolution and taught for 35 years in the Environmental Studies Department at Prescott College, Prescott, Arizona, until his retirement in January 2023. Mark's courses focused on animal biology — especially on birds and mammals — and on field ecology, including courses in Costa Rica, coastal Mexico, and Kenya. His research and publications explore the morphology of mammals; color pattern in birds; the contemporary relevance of Goethe's dynamic way of thinking to understanding evolutionary developmental biology (evo-devo); and most recently, the morphodynamic convergence between parrots and people.

Biologist Wolfgang Schad's exhaustive study of mammals identified polarities of form, color pattern, behavior, etc., and contexted these within a recursive threefold paradigm, illuminating relationships that have previously gone unnoticed. This dynamic interpretation of mammalian relationships conforms to the conventional Linnaean classification system but superimposes an additional interpretation and raises new questions about the nature of organic evolution.

**6:00 PM – 7:00 PM**

**Title: Mythology, Resistance and Propaganda in Russia and Ukraine**

Location: Hahn Auditorium



**Ekaterina Smirnova**

Ekaterina Smirnova (known by the name Miranda) is a poet, musician (soprano singer) and a writer. Born in Moscow of the 1980's, her family experienced the Perestroika years of Soviet Russia followed by its collapse. She moved to the US from Russia ten years ago, when she lived in California but recently moved to Texas. She has published 8 books of her poems and stories, written numerous articles in magazines, and organized concerts as an independent artist for several years. She has



also deeply penetrated the psychological currents of propaganda from her own life experience, and has sought ways to pierce it in a way that values the individual.

What is the role of Mythology today? What is the difference between Mythology and Propaganda? How do politics interact with the currents of mythology that move the souls of millions? How do all these interactions lead to war? These questions will be explored in this talk in order to show the antidote to the methods of propaganda, and find ways to achieve a genuine peace between warring nations. Mythology is critical for the infusion of true purpose in a people in a way that retains and protects the value of the individual.

**7:00 PM – 8:00 PM**

DINNER (Buffet)

Location: 2<sup>nd</sup> floor Lobby

## **DAY 3: NOVEMBER 2, 2024**

**8:30 AM – 9:30 AM**

BREAKFAST

Location: 2<sup>nd</sup> Floor Lobby

**9:30 AM – 10:30 AM**

Title: **Fluid geometry language / standing waves with a biological aspect**

Location: Hahn Auditorium



**Prof. Gabriel Kelemen**

Gabriel Kelemen, Ph.D., is an artist and researcher, Associate Professor and head of the Art History and Theory department on the Faculty of Arts and Design at West University of Timișoara, Romania. He lectures on the history of culture and civilization, urban culture, courses in archaeology and heritage. His studies on the geometry of liquids and stationary waves have led to the elaboration of his own theory - The Universality of Sphere-Vortex Principle and have been published in several editions.

The visualization of sound is one of the ancestral human dreams. Capturing the image of the ephemeral has been of great interest for scientific environments to this day. Almost everything in the universe is in a vibration state. Standing

waves obtained through acoustic stimulation over the liquids or smoothly divided powder uncover a vast territory of phenomenological research, calling for an exciting approach based on the dynamic of fluids, involving the laminar flowing but also the turbulent, cycloid flowing currents that create levo-dextrorotatory vortexes. The presentation refers to the relationship between nonlinear phenomena in fluid that generate forms with a biological aspect generated by sound.

**10:30 AM – 11:30 AM**

EXHIBIT TIME: The Universal Hermetic Harmony Principle KLMN CODEX

COFFEE

Location: Hahn Auditorium and Lobby

**11:30 AM – 12:30 PM**

**Title: From Mechanism to Organism: the Heart as a door to the Human Being**

Location: Hahn Auditorium



**Prof. Dr. Branko Furst**

Prof. Branko Furst, MD, FFARCSI is a graduate of the University of Ljubljana Medical School, Slovenia and completed residency in anesthesiology in Portsmouth and London, UK. The pursuit of an academic career took him to the US where he joined the faculty at the department of Anesthesiology at Texas Tech University Medical School in El Paso, Texas. From 1993 to 2021 he was on the faculty at Albany Medical College.

The current understanding of the heart and circulation is based on a physicalist model of a pump driving blood through a system of vessels. Despite formidable achievements in cardiovascular medicine and surgery the unintended consequence of this deeply entrenched dogma reduces the human being to a mechanism with dire repercussions not only for the image of the human being in medicine but also for social and economic life. In this presentation we will explore the causes for such thinking and the ways by which they can be overcome through phenomenology and living morphology. How can physics and developmental biology become a bridge for a deeper understanding of the circulation by which the dignity of the human being can be restored through biology and medicine? A summary of the current state of research in this pivotal field will be given.

**12:30 PM – 1:30 PM**

LUNCH (boxed)

Location: 2<sup>nd</sup> floor Lobby

**1:30 PM – 2:30 PM**

Title: **Reevaluating Chemistry, Electromagnetism and the Photoelectric Effect**

Location: Hahn Auditorium



**Sorin Cosofret**

Sorin Cosofret has a background in organic chemistry, analytic chemistry and the Agricultural Sciences, and has published extensively in the field of Oeneology in Romania. For more than a decade, he has also worked as a freelance researcher with a focus on the foundational aspects of chemistry, electromagnetism, thermodynamics, the nature of light and gravity. He specializes in carrying out simple experiments that probe the concepts that form the premises for physics and chemistry.

A new foundation for the entire exact sciences is necessary and my work, in the last decades, points out the main flaws in the current foundations. The fundamental concepts in chemistry and electromagnetism are in need of a consistency check, and there are many variations of some old experiments or some new simple advanced experiments which argue for the necessity of a change. Experiments related to electricity and magnetism are the simplest and the easiest to be replicated even at home, and therefore my presentation is intended to open some new directions of research by advancing such low cost experiments. New physical effects are to be discovered thereby and, for example, the electromagnetic induction can be proven a simple peculiar case of a larger physical effect. By introducing experimental variations for the relationship of electric currents to chemical, radioactive, photo-electric and other changes, it will also be shown that electricity needs to be distinguished from other forces and set upon a different foundation.

**2:30 PM – 3:30 PM**

Title: **Transforming Temperature**

Location: Hahn Auditorium

**Dr. Gopi Vijaya**

Thermal physics has always used models of heat – ranging from jiggling molecules to electromagnetic radiation as explanations for the behavior of heat. Yet it can be shown clearly using easily observable facts that the models fail, and the treatment of both heat and cold requires a different polar characterization to be accurate. The repercussions of this method of understanding heat transform our temperature scales, and also change our approach to entropy, statistical mechanics and the greenhouse effect.

**3:30 PM – 4:30 PM**

EXHIBIT TIME + COFFEE (ALL)

Location: Hahn Auditorium, Boole, Lovelace and Lobby

**4:30 PM – 5:30 PM**

Title: **Conclusion: Summary of the Conference**

Location: Hahn Auditorium

**Dr. Gopi Vijaya**

What is the common thread between all the subjects discussed at the conference? How do they play their role in creating a different foundation for scientific renaissance in keeping with the needs of the 21<sup>st</sup> century?

**5:30 PM – 6:00 PM**

Informal discussions on mentorship and collaboration opportunities with students.

The close of the conference