Peacocke @ 100
Continuous & Cocreation: Emergence in Scientific Age

Conference Programme & Abstracts

13th June – 14th June 2024

Link for Presentations

All the keynotes and short papers will be available via the same zoom link.

Zoom Link PLEASE REGISTER FOR JOINING INSTRUCTIONS

Peacocke Prize: Student Essay Competition

In memory of its founding President and former Chairman, the Revd Dr Arthur Peacocke, the Science and Religion Forum offers an annual essay prize. The student essay can address any issue at the intersection of science and religion and does not need to relate to the conference theme, although students are welcome to address the conference them should they wish. In 2024 the conference theme is Key topics from Arthur Peacocke's work. Full details: https://www.srforum.org/peacocke-prize

The 2024 Peacocke Prize is open from 1st April to 18th October 2024. Entrants must be registered as students (in school or university) at the time of submission OR have been registered in the previous 4 months.

- *i.e. Third year undergraduates completing studies at the end of the 23-24 academic year can submit in the UG category up to 18th October 2024. Likewise post-16 students transitioning to university in September 2024 can submit in the VI Form category up to 18th October 2024.*

The Peacocke Prize

The Peacocke Prize is usually run annually with the prize judged by a review panel. The Prize includes:

- A cash award of £250
- Free membership of the Forum for one year.
- UK travel and accommodation costs to the Forum's annual conference to present their winning essay in full (subject to panel decision) *
    - *As the 2024 series is online the winner will be presented with their prize during the November Conference (27th-28th) and receive an accommodation bursary for the 2025 conference.
- Publication of the essay as part of the conference "Special Section" in Zygon (subject to essay quality and continuing collaboration with Zygon or another journal or appropriate standing).

Stay in touch after the conference:

LinkedIn: https://lnkd.in/euznvmE9
X/Twitter: https://twitter.com/SciRelForum_SRF
Facebook: https://www.facebook.com/groups/411289328147318

Schedule Day 1 Thursday 13th June

All times BST	
12:00 – 12:15	**Opening Remarks**
12:20 – 13:35	KEYNOTE 1: Arthur Peacocke's Emergent Theology: Implications for a Theology of Condensed Matter Physics
Break	
13:50 – 14:35	PAPER 1: The Relation of Leibniz's Law of Continuity to the Reality of Matter
14:45 – 16:00	KEYNOTE 2: Anthropological Implications of Artificial Intelligence
Break	
16:15 – 17:00	PAPER 3: God in Nature: A Critical Examination of John's Haught's 'Confirmation' Approach to A Theology of Evolution
17:10 – 17:55	PAPER 4: Free Will and Quantum Mechanics in Light of the Metaphysics of John Duns Scotus

Schedule Day 2 Friday 14th June

All times BST	
09:00 – 09:15	**Opening Remarks**
9:20 – 10:35	KEYNOTE 3: Science and Religion in India: Beyond Disenchantment
Break	
10:50 – 11:35	PAPER 5: Emergent Metaphysics for Machine Consciousness
11:45 – 12:30	PAPER 6: The existence of intelligibility within matter in the natural world as a reflection of the incarnated Logos: how should we understand laws of nature?
Break	
12:45 – 14:00	KEYNOTE 4: Religious Diversity in Science: Insights from Psychological Research on Science and Belief in Society
14:10 – 14:30	Tribute to Arthur Peacocke
14:30 – 14:40	**Conference Plenary**

Keynote Lectures

KEYNOTE 1: Arthur Peacocke's Emergent Theology: Implications for a Theology of Condensed Matter Physics

Professor Mark Harris

ABSTRACT: Arthur Peacocke, one of the most illustrious Directors of Oxford's Ian Ramsey Centre, was also highly distinctive in the science-and-religion field for his emphasis on the providential and scientific realities of evolution, complexity and emergence. Famously, this emphasis was manifest in a robust treatment of ontological emergence to unify the sciences and humanities, and to capture the nature of the God-world relationship. When God acts in the world, God must first change the entire world on every (synchronic) level. In this centenary of Peacocke's birth the science-and-religion field is doing a great deal to celebrate Peacocke's lasting contributions. This talk will look at ways in which Peacocke's emphasis on top-down divine action and emergence may inform a theology of condensed matter physics, that branch of physical science which spans micro-, meso-, and middle-sized matters.

Professor Mark Harris holds the position of the Andreas Idreos Professor of Science and Religion, which is attached to a Professorial Fellowship at Harris Manchester College. As a physicist working in a theological environment, he thinks of himself as a theologian of science, interested in the complex ways that the natural sciences and religious beliefs relate to each other.
His research interests include the relationship between the physical sciences and theology, and the impact of science on modern views of the Bible, especially in thinking on miracles, divine action, and the environmental crisis. He is currently working on a critical study of the theological reception of quantum mechanics.
Mark is the Director of the Ian Ramsey Centre for Science and Religion in the Faculty of Theology and Religion, and he serves as President of the European Society for the Study of Science and Theology (ESSSAT).

KEYNOTE 2: Anthropological Implications of Artificial Intelligence

Professor Sara Lumbreras Sancho

ABSTRACT: This keynote explores the interplay between artificial intelligence (AI) and anthropology, focusing on the concept of authenticity and human experience. While AI excels in cognitive domains, achieving remarkable successes in problem-solving, data analysis, and pattern recognition, it fundamentally lacks the depth of human subjective experiences. This distinction emphasizes the importance of emotional, relational, and experiential aspects that define human existence. By contrasting AI's cognitive achievements with parallel human experiences, the discussion highlights the limitations of intellectualist interpretations of human identity, such as the Imago Dei, which traditionally emphasize rational and cognitive attributes. Reflecting on subjective experience underscores the value of relational and experiential dimensions, suggesting a more holistic understanding of human identity. This perspective challenges the current trends in anthropotechnics, which focus predominantly on enhancing cognitive and physical capabilities, and advocates for recognizing the integral role of emotional and experiential aspects in human development. The keynote argues for a balanced integration of cognitive and experiential elements in the discourse on human enhancement, identity, and the role of AI, proposing that true progress lies not only in technological advancements but also in a deeper appreciation of the human experience. This shift in perspective could have profound implications for how we understand and interact with AI, emphasizing the need to maintain the essence of what makes us human amidst rapid technological evolution.

Sara Lumbreras is a professor at the ICAI School of Engineering of the Universidad Pontificia Comillas. She is currently deputy director of Research Results at the Technological Research Institute and manages the chair of Science, Tecnology and Religion together with Jaime Tatay. She is the author of more than fifty academic publications and has directed or participated in more than twenty projects with private companies and public institutions. Her research focuses on the development and application of decision support techniques to complex problems. She works with classical optimization techniques such as Benders decomposition, heuristics and Artificial Intelligence. It operates in the energy sector (mainly in network design), in the health sector and in finance. She also has five years of experience in the private sector (JPMorgan London). She develops a line of research in philosophy of technology and the implications of artificial intelligence in anthropology. She is a Global Shaper of the World Economic Forum and a Marshall Memorial Fellow.

KEYNOTE 3: Science and Religion in India: Beyond Disenchantment

Dr Renny Thomas

ABSTRACT: Based on my book, Science and Religion in India: Beyond Disenchantment, this talk attempts to discuss through detailed ethnographic description, the manner in which scientists in India defined and lived their religion. Instead of posing science and religion as dichotomous categories, the talk demonstrates its strategic coexistence within the everyday lives and practices of Indian scientists. The talk will discuss the everyday life of 'science and religion' in the contemporary Indian situation, informed through debates in STS and social history of science. I will discuss the ways in which scientists I have studied and observed described a distinct identity of religious life; while being religious, the scientists tried to maintain a distinct identity from non-scientists and lay believers. It is this sense of distinction of belief among scientists that I intend to focus on in this lecture. I argue that an anthropology of science and religion opens up new insights in making sense of the worlds of science and religion; and it offers a grammar to understand the 'negotiations', 'strategies', and 'collaborations' of these categories.

Renny Thomas is a social anthropologist, specialising in science and religion, social justice and knowledge, and biographies of sciences in postcolonial India. He is an Assistant Professor of Sociology and Social Anthropology at the Department of Humanities and Social Sciences, Indian Institute of Science Education and Research (IISER) Bhopal, Madhya Pradesh, India. He has been the Charles Wallace Fellow in Social Anthropology at Queen's University Belfast, Northern Ireland, UK (2017-2018) and Visiting Fellow at the Department of Cultural Anthropology and Cultural History, Friedrich-Schiller University-Jena, Germany (2022-2023). Thomas is the author of Science and Religion in India: Beyond Disenchantment (London: Routledge, 2021), and co-editor of Mapping Scientific Method: Disciplinary Narrations (London: Routledge, 2022). He is currently finalising a co-edited volume titled Decolonial Keywords: South Asian Thoughts and Attitudes (Bloomsbury), and working on another co-edited volume on technology and religion. He currently serves as an associate editor of the journal, Social Studies of Science (SAGE).

KEYNOTE 4: Religious Diversity in Science: Insights from Psychological Research on Science and Belief in Society

Dr Carissa Sharp

ABSTRACT: It has long been acknowledged that there are gender and racial disparities in attainment in STEMM disciplines. This phenomenon is often termed "the leaky pipeline" – indicating that people tend to drop out of STEMM fields along every step of the career ladder on the way up to full, tenured professor. A large amount of research has investigated some of the contributing factors to this underrepresentation, as well as some potential interventions to help with retention. However, there is an additional identity that has been largely overlooked when it comes to representation in science – religious identity. In this presentation I will investigate some potential explanations for the underrepresentation of religious individuals in science: 1) an intuitive explanation that is supported by cultural scripts about the conflict between science and religion, namely that religious individuals themselves see conflict between their religious beliefs and science, 2) that religious individuals see the combination of the social identities of "religious" and "scientists" as being counter-stereotypical or surprising, and 3) that that science itself is a

hostile environment for religious individuals. In this presentation I will argue that the majority of religious individuals in fact do not have problems with reconciling their beliefs in their religion and in science, or difficulty reconciling the identities of "scientist" and "religious," but that science can often be a hostile environment, which discourages religious individuals from continuing in STEMM careers.

Carissa is a psychologist of religion, primarily focusing on people's perceptions of the relationship between science and religion and how people think about God. She is Assistant Professor in Psychology of Religion at the University of Birmingham.

She has previously held positions as University of Oregon, Coventry University, and most recently Newman University, where she was associate director of the Centre for Science, Knowledge, and Belief in Society. Carissa is currently co-investigator of the "Science and Religion: Exploring the Spectrum Global Perspectives" project, and co-principal investigator of the "International Research Network for the Study of Science and Belief in Society" project .

Short Papers

PAPER 1: The Relation of Leibniz's Law of Continuity to the Reality of Matter

Robert Seletsky; University of Colorado Boulder

ABSTRACT: This essay discusses a version of Leibniz's Law of Continuity which can be seen as a natural law holding that all objects in motion change gradually rather than discontinuously. Leibniz's Law of Continuity is both a natural and a metaphysical law. Leibniz's Law of Continuity relates to his metaphysical conception of the reality of matter because objects in motion are real or actual material objects. The primary outcome is a contribution to the secondary literature on Leibniz's Law of Continuity. I will consider two of Richard T.W. Arthur's claims of Leibniz's notions of continuity and argue that they are mistaken. I contend Arthur's first mistaken claim is Leibniz's conception of continuity as solely an abstract or ideal property. I will argue that Leibniz's view of continuity is best described as a gradual change of an actual object in motion. The heart of my argument is Arthur's view of continuity as a solely ideal property does not seem to explain the foundations for Leibniz's Law of Continuity since this law applies to actual objects in motion. One reason for this is Leibniz's belief in the existence of the only substances, called "monads", which must exist in all of creation. I hold that Arthur's second mistaken claim is Leibniz initially believing that matter consists of infinitely many ideal points. I will argue that Arthur's second claim is contradicted by two of Leibniz's initial views. Firstly, early in his career Leibniz believes that an actual object in motion must be ultimately composed of infinitely many actual parts of matter. Secondly, at first Leibniz specifically claims that space, which consists of matter, does not contain any points.

PAPER 2: God in Nature: A Critical Examination of John's Haught's 'Confirmation' Approach to A Theology of Evolution

Ning Xu; University of Oxford

ABSTRACT: In this paper, I shall examine John Haught's theology of evolution in light of his 'confirmation' approach to science and Christian theology. Tracing the rationale behind Haught's thinking, I ask whether 'the idea of God as revealed in Christ' has 'illuminate[d] the story of life without contradicting…the scientific information pertaining to evolution' (Haught, 2006). At the heart of John Haught's 'confirmation' approach to a theology of evolution lies a profound understanding of an intrinsic correlation between evolutionary science and Christian theology. For Haught, theology, when shaped by a 'confirmation' approach to evolution, offers a rigorous and coherent framework through which Darwinian thought may be illuminated. In attempting to penetrate into the depths of reality, does Haught's 'confirmation' approach facilitate a greater understanding of evolution in light of Christian theology, or does it risk compromising the integrity of both, by conflating the two as one metaphysical narrative? Anchored by this question, I shall argue that by highlighting the ontological compatibility between evolutionary science and theology,

Haught's 'confirmation' approach reframes the interdisciplinary dialogue from one of 'proof' to 'resonance', and unveils the satisfactory degree of explanatory capacity of theology in both correlating with and accounting for evolution. In tracing Haught's engagement with evolutionary materialism, I shall examine his 'confirmation' approach in dialogue with the notion of 'inference to the best explanation', before turning to the idea of a renewed 'theology of nature' under which his approach may be further developed.

PAPER 3: Free Will and Quantum Mechanics in Light of the Metaphysics of John Duns Scotus

Gideon Lazar; St. Basil Institute for the Study of the Theology of Creation

ABSTRACT: Sean Carroll has argued that all of our daily experiences can be explained in terms of quantum field theory and weak energy gravity, and so consciousness and the experience of free will must somehow be emergent properties only. Libertarian free will would therefore not exist. However, Carroll's preferred interpretation of quantum mechanics, the many worlds interpretation, suggests a way to reintroduce libertarian free will into quantum field theory. This paper will explore such an approach by comparing quantum physics to the medieval philosopher John Duns Scotus (d. 1308). Quantum physics initiated a significant shift in the way scientists understood nature. It changed the world from fundamentally deterministic to fundamentally probabilistic. A similar shift occurred in metaphysics in the time of Scotus. Scotus upended the deterministic metaphysics of Aristotle through the concept of synchronic contingency in order to preserve both human and divine freedom. Scotus introduces his own "many worlds" theory, but rather than a plurality of actual worlds, Scotus suggests an infinite number of possible worlds in the divine mind. In light of synchronic contingency, the many worlds interpretation of quantum mechanics should be understood as a multiplicity of potential worlds virtually contained in the wave function rather than a multiplicity of actual worlds. Furthermore, Scotus's concept of an indeterminacy of actuality provides a way to justify libertarian free will. This paper suggests a "selected branches interpretation" of quantum mechanics whereby the will selects which branch of the wave function to move to. This allows for free will without violating any of the laws of quantum field theory. We do not consciously experience this selection because of Scotus's metaphysics of the plurality of forms. The soul acts upon the organs which it informs. However, those forms can in turn mediate this to lower matter. Thus, this seems to leave open the possibility of free will within quantum field theory. Given the extremely large number of particles in a human body this seems almost impossible to test, but since all that is being maintained is that quantum field theory does not rule out libertarian free will, experimental verification is not necessary.

PAPER 4: Emergent Metaphysics for Machine Consciousness

Andrew Proudfoot; University of Nottingham

ABSTRACT: Recent advances in Artificial Intelligence (AI), impressive though they are, do not present significant challenges to theological ontologies: AI remains an artefact to be used or abused by humans. But what if an AI were developed or emerged with its own centre of consciousness? How would this new class of being fit within schemas which for millennia have assumed that only humankind (or our biological ilk) enjoys phenomenological experience? Christian metaphysics has historically been dominated by dualism where consciousness is seen as part of our God-given soul, which can lead to trite dismissal of the possibility of machine consciousness. Alternative monistic metaphysics may be able to accommodate the notion of conscious machines more readily, but often at a price which is too high for theologians of my stripe to bear: the abandoning of transcendence as God becomes an emergent part of the cosmos itself.

In this paper, I seek to identify a metaphysical schema which is both permissive of machine consciousness and consistent with orthodox Christian belief. My point of departure is Terrence Deacon's theory of constitutive absences, which seeks to recognise the power of constraint in shaping and preserving dynamic systems such as biological

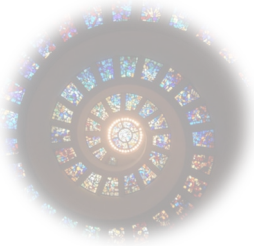
life—and consciousness. This allows an ontologically real, physically extended, but immaterial and non-energetic mind to emerge from matter. Finding Deacon's schema inadequate to explain how the radically different nature of consciousness emerges from the material world, I then survey the resources offered by panpsychism. This too comes at a high price: the need to accept that our own consciousness is the sum of many other, smaller, consciousnesses all the way down, which renders incoherent the concept of individual relationship to God. The alternative of panprotopsychism alleviates this since we can remain the bearer of the single consciousness in our body, with the assertion that there is something in the nature of the cosmos which facilities the appearance of consciousness in suitable circumstances.

Combining panprotopsychism with Deacon's dynamic emergence provides a schema which allows for the emergence of ontologically real consciousness from the physical cosmos, where that cosmos is setup with properties to facilitate this emergence as belonging to, rather being alien in, the physical world. While I make no claim that this underdeveloped metaphysic is a solution to the hard problem of consciousness, it does satisfy my more limited goal. God remains our transcendent creator, with the whole of creation designed with the telos of producing conscious life through "natural" processes. The barrier to machine consciousness is neither metaphysical nor theological, but practical: how to engineer a system with the right sort of dynamic behaviour and constraints to allow consciousness to emerge. Many questions remain around how such an entity would fit into God's economy, but with this first step I hope to demonstrate that this eventuality would not undermine our belief in God as creator and source of being, of life, and of consciousness.

PAPER 5: The existence of intelligibility within matter in the natural world as a reflection of the incarnated Logos: how should we understand laws of nature?

Luca Settimo; University of Nottingham

ABSTRACT: In this paper I will reflect philosophically and theologically on the presence of order and regularity discovered by scientists in the natural world. In particular, I will discuss the theological implications deriving from the fact that there exist laws of nature (i.e. the laws of physics expressed by mathematical formulas) and I argue that these are reflections of the incarnated Logos. However, while the intelligibility of the natural world grants the foundation for scientific investigation, it is difficult to pinpoint precisely where this intelligibility resides and to provide a representation of this concept, because every discovery of a law of nature is characterised by (i) a cataphatic moment – in which we try to describe deterministically a phenomenon (such as the movement of an object through the Newtonian gravitational law) and (ii) an apophatic moment – when we realise that we have failed to fully comprehend the event being studied. Through these reflections I demonstrate that the notions of cataphaticism and apophaticism do not apply solely to theology, but also to natural physics/modern science.



About SRF

The Science and Religion Forum (SRF) had its inception in a series of discussions involving scientists, theologians and clergy which took place in Oxford in the early 1970s. The key figure in the early discussions was Arthur Peacocke who was to become the Forum's first Chairman, and later a Vice President and then President.

Today, SRF exists to promote discussion between scientific understanding and religious thought on issues at the interface of science and religion, and membership is open to people of any religion or none.

History of the Forum

In 1972, informal consultations began in Oxford between a group of scientists, theologians, and clergy who were concerned to relate their scientific knowledge and methods of study to their religious faith and practice. This group, gradually increasing in size, met annually.

It was decided at a meeting in Durham, in 1975, to inaugurate the SCIENCE AND RELIGION FORUM to enable further discussion of the complex issues that arise at the interaction between scientific understanding and religious thought. Such issues need close attention and continuing re-assessment. Together with the social and ethical decisions demanded by scientific and technological advances, these issues have formed the subject of the Forum's meetings since that date.

The Forum received charitable status in 1994. In 2005 the Science and Religion Forum merged with the Christ and the Cosmos Initiative. (The latter had been founded by the Revd Bill Gowland, a past President of the Methodist Conference, with the intention of bringing the latest knowledge of scientific thinking within the orbit of the enquiring layperson.

Membership

Science and Religion Forum a UK charity and membership organisation that is dedicated to promoting the discussion between scientific understanding and religious thought on issues at the interface of science, religion, and society. We are open to members of all faiths and none, and our conferences and student essay prize are open to all.

We have been working hard to diversify and broaden our membership, so that it is more reflective of those engaging with questions of science (including social sciences) and all religions. We have competitive membership rates. If you are interested in becoming a member of the follow the link below. Or to be added to our mailing list email srforum.membership@gmail.com.

Membership benefits include (for full details see the website):

- The receipt of two editions of Reviews per year
- Member-only early access to recordings of talks at SRF conferences.
- Reduced rates for all SRF events, and opportunities for Early Bird discounts on the biennial hybrid conference.
- Student members receive free access to online events.
- Access to versions of conference papers published in external journals such as *Zygon*.
- Notification of the Forum's activities, details of relevant third party events and advance information concerning SRF conferences.

JOIN/ RENEW NOW

Membership Costs for 2024 (membership runs for 365 days from purchase)
Student Membership 1 year £15
Full Membership 1 year £30
Joint Full Membership (2 people same address) 1 year £45
Supporter Membership 1 year £100