



Natural Science Section at the Goetheanum

Evolving Science 2021

October 7 – 10

Goetheanum | Halde Saal | Dornach

From Living Thinking to Living with Nature

Approaches, Challenges and Perspectives of a Sustainable Science



International Conference: **Evolving Science 2021**

From Living Thinking to Living with Nature –

Approaches, Challenges and Perspectives of a Sustainable Science

Autumn Conference of the Natural Science Section at the Goetheanum

Dear Friends of the Natural Science Section at the Goetheanum!

The Research Institute at the Goetheanum has been working on the spiritual extension of the natural sciences for 100 years now. The research methods and objects have undergone quite a metamorphosis during this time – from image-creating methods to depicting the temporal form of the plant, from the applications of morphology for finding remedies to characterizing genetically modified plants, from a new optics of images to the presentation of Goethe's inverse spectrum. An overview with examples will be presented at the beginning of the conference.

Identity Inwards

On the first and second day, the human-forming potential of Goethe's approach to science – as an educational path – will be addressed. In addition to the original concern of making visible the forces at work in the living, there is the awareness that scientists – following Goethe's approach – must transform themselves into methodological instruments, because the interior of nature – its laws – can only appear in the human being. Only when I know the part I play in what appears before me can I adequately connect the world of senses with the world of thought in cognition. Conversely, the world of senses and the thought content experienced in it are the basis for forming the certainty of knowledge in a scientifically founded anthroposophy.

Identity Outwards

Goetheanism demands that the object of research be experienced in its comprehensive context. This includes the historically developed scientific research community. Our work rests on the shoulders of our predecessors. Every approach that broadens our perspective enriches the picture of the whole. This view leads to a pluralism in science, which is the focus of the second evening. A look at the history of science shows that no result remains valid outside its defined context. When results are directly translated into socially relevant action, a problematic generalization can take place.

Visions

The crisis of the earth is also the crisis of mankind – the ecological crisis and the current pandemic are like two sides of the same coin. The third day will focus on the science of interrelationships. Evo-Devo, microbiology and ecology demand and promote a contextual and procedural way of thinking, such as the one Goethe postulated for the knowledge of living things. The contributions on Sunday illuminate the connection between our mental “deeds” and the processes in nature. A creative will and a wealth of mental concepts make abundance and diversity of life possible. From this point of view, a Goethean science of nature is not a “luxury good” but a “life insurance” for the common future of earth and man, and at the same time it is a source for individual spiritual self-development.

We look forward to your participation!

Johannes Köhl, Susanna Kümmell, Matthias Rang, Ruth Richter, Carolin Schürer, Meinhard Simon, Johannes Wirz & Mara Born

Format

As with “Evolving Science 2015 / 2018”, there will be spaces for **project presentations** and **workshops**, which can be registered on our homepage up until September 15: www.science.goetheanum.org/en/conferences-colloquia/evolving-science-2021

The conference will be bilingual in German and English.

If participation is not possible for financial reasons, please do not hesitate to contact us: science@goetheanum.ch

For additional information about the conference and the latest Corona regulations, see our website which is updated regularly: www.science.goetheanum.org/en/

PROGRAM

Venue: GOETHEANUM | Halde Saal | Dornach

Time	Thu. 7.10.	Fri. 8.10.	Sat. 9.10.	Sun. 10.10.
	From where? History	Identity Inwards	Identity Outwards	Where to? Healthy Earth
09.00		Review of the Previous Day		
09.30	Vesna Fortšnerić Lesjak From the Plant to the Human Being Using the Example of Wild Teasel	Axel Zienke From Goethe to Evo-Devo	Matthias Rang Windows and Mirrors - Metamorphoses of a Principle of Nature	
10.30		<i>Coffee Break</i>		
11.00	Simone Helmle Encountering the Biodynamic Whole: On the Practical Education of Future Demeter Farmers	Thomas Hardtmuth On the Genetic Plasticity of Viruses - Aspects of a Dynamic Microbiology	Johannes Wirz Diversity Saves Climate	
12.00		World Café I	World Café II	Closing
12.45		<i>Lunch Break</i>		
15.00		Project Presentations & Workshops		
16.30		<i>Coffee Break</i>		
17.00	Welcome	Project Presentations & Workshops		
	Johannes Kiühl 100 Years Research Institute at the Goetheanum			
18.30		<i>Evening Break</i>		
20.00	Short Eurhythmy Ruth Richter Goethe's Phenomenology	Short Eurhythmy Hasok Chang Scientific Pluralism and Complementary Science	Short Eurhythmy Charles Eisenstein The Religion of Science	(subject to change)

Keynote Speakers

Hasok Chang | Hans Rausing Professor of History and Philosophy of Science at the University of Cambridge. Degrees from Caltech and Stanford; teacher at University College London. Author of “Is Water H₂O? Evidence, Realism and Pluralism” (2012), and “Inventing Temperature: Measurement and Scientific Progress” (2004). Co-founder of the Society for Philosophy of Science in Practice (SPSP), and the Committee for Integrated History and Philosophy of Science.

Charles Eisenstein | Speaker, essayist and author of 5 books, including “Sacred Economics” and “The More Beautiful World Our Hearts Know is Possible”. Working area spans themes of technology, politics, money, ecology, the indigenous, healing, and philosophy, described in terms of a transition in civilization’s defining mythologies. Degree in Mathematics & Philosophy from Yale University; ten years Chinese translator in Taiwan. Four sons, lives in Rhode Island, USA.

Vesna Forštnerič Lesjak | Pharmacist and farmer; individual guidance of students for Goethean botany; various research projects of Goethean plant knowledge for pharmacy and medicine. Since 2013 production company for food supplements and cosmetics, foundation and management of the association for further education in natural sciences “Sapientia” and the section for anthroposophical pharmacy and medicine in Slovenia; 2019 takeover of the ecological family farm and Demeter certification.

Thomas Hardtmuth | Physician, freelance author, long-time lecturer in health sciences and social medicine at the Baden-Württemberg Cooperative State University. Since 1985 medical practice at various hospitals, most recently senior physician for surgery and thoracic surgery at Heidenheim Hospital. Regular lectures, seminars and publications in the field of medical anthroposophical anthropology.

Simone Helmle | Studied horticultural sciences. Doctorate and habilitation in rural sociology. Researcher for many years at the Universities of Munich, Hohenheim and Giessen. Since 2014, head of the Demeter Academy of Demeter e.V. in Germany. Development and management of further training for members of the biodynamic movement. Lives with her family in Stuttgart.

Johannes Kühn | Physicist; scientific collaborator at the Natural Science Section at the Goetheanum. 1982–1996 Teacher of physics, chemistry and mathematics at the Waldorf School Stuttgart Uhlandshöhe. 1996–2019 Head of the Natural Science Section. Works on various areas of physics and technology, especially Goethean optics and colour theory, as well as on the didactics of physics.

Matthias Rang | Physicist, research stay in the field of near-field spectroscopy at the University of Washington in Seattle (USA). 2015 PhD at the University of Wuppertal on phenomenological approaches to complementary spectra. Since 2007 scientific collaborator of the Natural Science Section at the Goetheanum and since 2019 co-leader of this Section.

Ruth Richter | Gardener, 1989–1999 Training in plant morphology in the study year of the Natural Science Section and in research projects with Jochen Bockemühl. Since then research assistant at the Research Institute at the Goetheanum. 2009–2014 Studies in philosophy of science, history of science and philosophy at the universities of Bern and Basel. Since 2015 editor of the journal “Elemente der Naturwissenschaft”.

Johannes Wirz | PhD in molecular genetics, projects at the Research Institute at the Goetheanum on the ecology of butterflies and the enhancement of their habitats, on strengthening the health of honey bees and on “non-target effects” of genetic modifications on cultivated plants. Additionally, since 2014, staff member of the Fischermühle teaching and experimental apiary, *Mellifera e.V.*; seminars on Goethean natural science, anthroposophy, beekeeping according to nature and current developments in biology. Since 2019 co-leader of the Natural Science Section at the Goetheanum.

Axel Ziemke | Diploma studies in biochemistry and doctoral studies in philosophy at the Martin Luther University in Halle; postdoctoral researcher at the Research Training “Group Cognition, Brain, Neuronal Networks” at the Ruhr University in Bochum; collaborator at the Institute for Interdisciplinary Research and Advanced Training at the University of Klagenfurt; teacher of biology, chemistry, philosophy and drama at the Rudolf Steiner School in Remscheid; freelance author with interests in evolution, brain research, philosophy of mind, political philosophy.

General Information

From Living Thinking to Living with Nature – Approaches,
Challenges and Perspectives of a Sustainable Science
Autumn Conference of the Natural Science Section at the Goetheanum
from Thursday 7th to Sunday 10th October 2021
Registration requested by: Thursday 23rd September 2021

Conference fees: regular price: CHF 320
concessions¹: CHF 215

Conference meals

The lunches on October 8th and 9th 2021 are included in the conference price and cannot be deselected. 3 dinners can be booked separately on October 7th, 8th and 9th 2021 for a total price of CHF 75. The meals cannot be booked individually. Lactose and gluten-free meals can be provided; unfortunately, other food intolerances cannot be taken into account in this context.

Parking permit

For the period of the conference: CHF 21 (not right next to the Goetheanum building). If you have a disability, please display your disability badge in your car.

Methods of payment/confirmation

In order to avoid credit card fees and large crowds, we ask you to settle the bills by bank transfer at least 3 days before the start of the event. Paid cards can be picked up at reception up to half an hour before the start of the event.

In the case of group registrations, the institution receives a collective invoice; Subsequent registrations can only be booked and billed individually.

Credit cards (all countries): The full amount will be charged to your credit card as soon as your booking has been processed. You will receive postal or email confirmation of your booking and payment.

Invoice Switzerland: Confirmation of booking and an invoice will be sent to you once your booking has been processed. Please note that we only send out invoices up until 10 days before the beginning of an event. After that, payment is only possible by credit card or on arrival.

Invoice Eurozone: Confirmation of booking and an invoice will be sent to you once your booking has been processed (Euro account). Please note that we only send out invoices up until 7 days before the beginning of an event. After that, payment is only possible by credit card or on arrival.

Other countries / non-EU: Payment only possible by credit card. After processing, a registration confirmation and debit confirmation will be sent by email.

Please note: the invoice amount must be received by us 3 DAYS before the start of the event.

Conference tickets: In order to avoid credit card fees and large crowds, we ask you to settle the bills by bank transfer at least 3 days before the start of the event. Paid cards can be picked up at reception up to half an hour before the start of the event. In addition to cash in CHF or €, we also accept VISA, MasterCard, ec-direct and Postcard Switzerland.

Cancellation: Bookings may be cancelled free of charge up to 14 days prior to the beginning of the conference (23.9.2021, date of posting). After that, 50% of the conference fee will be charged. The parking permit may be cancelled free of charge up to 1 day prior to the begin of the conference (6.10.2021). Cancellation on the day when the conference begins or failure to attend are subject to a 100% invoice total. Substitutes will be accepted at no extra cost.

Cancellation insurance: Subject to a payment of 5% of total costs (CHF 10 minimum) full cancellation insurance can be taken out to cover illness (including dependent children and partner), job loss and force majeure. Terms of insurance can be downloaded at: <https://www.goetheanum.org/en/events/informations>

Data processing: All data will be electronically recorded, filed and not passed on to any third party.

Booking Form

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Please complete the booking form and mail, fax or email to:

Goetheanum Empfang, Postfach, CH-4143 Dornach

Fax + 41 61 706 44 46, Tel. + 41 61 706 44 44 email tickets@goetheanum.org

Please fill out in block capitals!

Ms Mr

Name, first name _____

Billing address private address address of institution _____

Name of institution _____

Street, n° _____

Town _____

Postcode _____

Country _____

Phone/fax _____

Email _____

I need translation into English German

Conference ticket (including 2 lunches on October 8th-9th 2021, compulsory)

320 CHF normal price 215 CHF reduced¹

Meals (3 dinners) 75 CHF

Breakfast (3x) 45 CHF

Food intolerance to gluten lactose

Parking at the Goetheanum Parking card: CHF 21

Insurance

Cancellation insurance (5% of the total costs, CHF 10 minimum)

See cancellation conditions in the General Information

Payment methods

on invoice (only Switzerland and Euro zone)

Credit card (all countries) Visa MasterCard

Card number: ____/____/____/____ Expiry date: __/ __

I agree to the terms of payment and cancellation.

Place, date, signature

¹ Concessions apply for students, schoolchildren, OAPs, the unemployed, those in training, military or civil service and people with disabilities who receive benefits. Proof of status has to be submitted with your booking form.

Data processing: All data will be electronically recorded, filed and not passed on to any third party.

Terms and Conditions will be sent on request or can be accessed online at

<https://www.goetheanum.org/en/events/informations>