

Science Group of the Anthroposophical Society in Great Britain

Newsletter – September 2016

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News

Science Group revitalisation

David Heaf is stepping down as treasurer, membership secretary, newsletter editor and webmaster of the Science Group. A meeting of the Science Group has been arranged for November (see 'Meetings' below) to facilitate the handover to a new carrying group which we hope to establish at that meeting. Records indicate that this will be the first formal organisational meeting of the Group since 1995!

Obituary

Georg Maier, 25 May 1933 – 14 June 2016

For more than thirty years Georg Maier was active as a scientist, teacher and advisor in the Goetheanum's Natural Science Section. He is known for his original and profound scientific work, his open approach as a teacher who loved puzzles, for his uprightness and consistency – and not least the spiritual strength and patience with which he mastered his Parkinson's disease.

Emigration: Johann Georg Albert Maier was born in Stuttgart (DE). His sister Magda was four years his senior. Reinhold Maier, his father, was a lawyer and the first premier of Baden Württemberg after the war. His mother, Gerta, came from the Jewish Goldschmidt family. In 1939, the children emigrated with their mother to Great Britain where Georg and Magda attended the Wynstones Rudolf Steiner School. After the war the family was reunited in Stuttgart where the children went to the Uhlandshöhe Waldorf School.

It was Georg's cousin Heinz Maier-Leibnitz who advised him to study physics, pointing out that one had to learn chemistry whereas one only needed to understand physics. Georg earned his PhD in Munich in 1955.

A lecture by Paul-Eugen Schiller inspired him to work for the Natural Science Section, doing research into the effect of the life forces in physical experiments where all known physical influences were excluded. But these experiments led nowhere – and resulted in his dismissal. Georg Maier learned that etheric and spiritual forces need to be investigated in a different way. Another important event at that time was that he met his future wife Christa, who cared for him admirably during his final years.

Research projects: He then went on to do research into nuclear reactors. His work on the neutron diffraction of crystals would later form the foundation for the Goethean exploration of diffraction phenomena in light.

In 1969 Georg Maier was called back to the Goetheanum when the Institute was newly founded with Jochen Bockemühl

as section leader. The work started then was extremely fertile at the scientific, anthroposophical and human level. His work with Jochen Bockemühl focused on finding new access to elements and kinds of ether. With other anthroposophically oriented physicists, such as Stephen Edelgass, Manfred von Mackensen, Ernst-August Müller, Heinz-Christian Ohlendorf and Thomas Schmidt, he worked on original approaches to many areas, optics in particular. In the 1990s he became particularly interested in the language of phenomena: the profound significance of encounters in the sensory world. Much of the work done during that period is reflected in the book *Being on Earth* which he wrote with Stephen Edelglass and Ron Brady.

In the room where he died a book lay open with St. John's Prologue – the words 'filled with devotion and truth' come to mind.

Johannes Kühl, Goetheanum

In Memoriam Georg Maier

To colleagues and friends of the Natural Science Section,

Already deeply affected by his illness, Georg Maier celebrated his last birthday by reading with friends a philosophical text on the significance and appreciation of phenomena. When it was a case of celebrating, he always liked to connect it with some content, with more worthy work.

So as a memorial to him we would like to hold a colloquium to discuss themes that were important to him during his life. These would be themes from physics, and of course optics, but also in philosophy and anthroposophy. In this way we should like to appreciate the work and aims of Georg Maier.

This event will take place on 1 October 2016 in Rudolf Steiner Halde I at the Goetheanum, Dornach, Switzerland.

Contributions will be made by Rolf Reisiger, Hans Peter Seipp, Peter Stettler, Matthias Rang, Henry Saphir, Johannes Kühl, Ruedi Bind, Susanne Böttge, Gudrun Hofrichter, Andreas Heertsch, Ruth Richter, Johannes Wirz and Christa Maier.

On 2 October, Hans-Christian Zehnter will lead a dawn observation outing inspired by indications from Georg Maier.

A snack will be available in the break.

In addition we plan to publish as many of these contributions in *Das Goetheanum* weekly. To book for the break snack please contact science(at)goetheanum.ch by 20 September. With warm greetings, *Johannes Kühl* for the Goetheanum and the Natural Science Section, Hügelpweg 59, 4143 Dornach, Switzerland.

Meetings

Science Section of the School of Spiritual Science

There will be a Science Section Meeting at the Field Centre Nailsworth, Gloucestershire on Friday 11th November 10am to 4pm. This will include a free rendering of a class lesson given by Johannes Kühl and planning meetings for events in 2017 connected with the Collaborative Science Project.

Science Group of the Anthroposophical Society in Great Britain

Saturday 12th November 10am to 4pm at Elmfield School Stourbridge.

10:00 am Welcome and Introductions

10:30 Talk by Johannes Kühl : Our Relationship with Sub-Nature and Super Nature.

12:00 Organisation of the Science Group: Statement of Accounts, Report from the Newsletter Editor, election of carrying members, future work and development.

Bring and share lunch.

2:00 Talk on the colour work of Michael Wilson by Laura Liska

Reports on scientific work in Britain: on bees, on water and flow research, on Metals and potentiation, on evolutionary biology and the Collaborative Science Project and more.

Contact: Alex Murrell, 26 Arundel Drive, Rodborough, Stroud, GL5 3SH. Tel: 01453 766484.

Email: alexandermurrell(at)hotmail.com.

Living in a Technological World – Technology as a challenge to develop new human capacities

An autumn conference organised by the Natural Science Section

6-9 October 2016 at the Goetheanum, Switzerland

For decades we have celebrated the almost daily advances of technology. Every year more earth material is moved by machines than by natural processes; phoning home while climbing a remote mountain is no problem since satellites reach anywhere on the planet; weather patterns are reliably predicted days in advance by computers with immense computing power. Human physical activity, communication skills and intellectual capacities have been hugely enhanced and extended. For many, the household robot and the self-propelled car are just waiting in the wings.

These advances do not come without regrets. The many perils of technology have only increased over the last hundred years, noticed especially when technology endangers living organisms or dangerous substances are mishandled. There is an equally alarming aspect to technology found in social environments, for example in the lives of those who mine for raw materials, or wherever individual human development is affected. Nevertheless, technology is – and will continue to be – an indispensable and integral part of human culture. The point is, then, to move forward with it in a way that is productive, responsible, and creative. Could it be that a technological world offers us an opportunity to strive for new human capacities that we would not otherwise be able to reach? Exploring this possibility seems to us to be one of the most noble tasks for the future to which anthroposophy can contribute.

One path towards the development of these new human capacities comes in the legacy of Rudolf Steiner's last 'Letter to Members' (GA26 'From nature to sub-nature.'). In it he indicates two mutually dependent tasks: man must understand 'sub-nature' for what it truly is, and this is only possible "if he rises, in spiritual knowledge, at least as far into extra-earthly super-nature as he has descended, in technical sciences, into sub-nature". During this conference we wish, on the one hand, to take a look at technology and clarify the essential character of what Steiner refers to as 'sub-nature', and on the other hand, we wish to explore the paths that might lead us into 'super-nature'.

For that purpose we designed the conference in such a way that we will look at three realms of technology: technology which supports the physical body, technology which influences life processes and technology which engages and some-

times replaces our consciousness. To address the access to super-nature we will also look in three directions: our relationship to art, our relationship to night and the care of our inner life in meditation and worship.

Keynote lectures: Technology I: Mechanics and Electricity, *Peter Tontsch, Andreas Pook*. Relationship to Super-Nature I: Cultivating Art, *Christiane Haid, Michael Kurtz*. Technology II: Chemistry and Life, *Martin Rozumek, Johannes Wirz*. Relationship to Super-Nature II: Cultivating the Night, *Andre Bartoniczek, Johannes Kühl*. Technology III: Consciousness and Intelligence, *Edwin Hübner, Gopi Krishna Vijava*. Relationship to Super-Nature III: Cultivating Inner Life – Meditation and Worship, *Susanne Böttge, Kees Veenman*. Plus World-Café sessions, contributions of participants, cultural event.

We encourage you to prepare a short (15 min) presentation for the 'contributions of participants' session. It can be related to the theme of the conference, although it does not need to be, but it should be of interest for a scientifically oriented audience. Please submit a title via email:

science(at)goetheanum.ch.

We look forward to you joining us, Johannes Kühl and the Team at the Natural Science Section in Dornach.

Full booking details at:

<https://www.goetheanum.org/8278.html>

Picture Forming Methods

3-5 March 2017, Loheland near Fulda/Germany

We would like to invite you to participate in the International Meeting on Pattern-Forming Methods 2017.

Pattern-forming methods (e.g. methods based on evaporation-induced crystallization, paper chromatography, and other pattern forming processes applied to quality analysis and/or diagnosis) have a great potential for many possible application fields and meet a growing interest of the today's science.

We are a group of researchers based in central Europe working with pattern-forming methods. Our group has been organizing yearly workshops for the past 15 years with the aim of exchanging experience and knowledge, and establishing collaboration possibilities. Our wish is to extend our workshop and create an international network of people working with pattern-forming methods applied for analytical purposes in different fields (e.g. agriculture, food quality, medicine).

The next International Meeting on Pattern-Forming Methods 2017, will be held on 3-5 March 2017 in Loheland near Fulda/Germany (Fulda is about one hour from Frankfurt-am-Main airport).

The main purpose of this meeting is to get to know each other and to learn what each one of us is working on. Furthermore, we hope that this initiative may contribute to the exchange of experience and knowledge thus enriching the background of each one of us, and enhancing our international collaboration.

Every participant to the meeting is expected to give a short (max. 10 min) presentation including biographical facts, which lead the person to pattern-forming methods, methodological approach/approaches, and main research focus. Additionally to this presentation every participant may give an oral presentation and/or a poster presentation.

Important dates are:

- Deadline for oral presentation: 30 November 2016

- Deadline for poster presentations: 31 December 2016

- Registration is possible until the 15 January 2017

The arrival of participants is planned on the evening of 3rd March 2017 and the meeting will end on the 5th March at

12.30. There is a possibility to have dinner on the 3rd March and lunch on the 5th March, which require an additional booking.

Hotel rooms (30-60 Euro) can be booked through:
<http://www.loheland.de/index.php?id=wiesenhaus-kontakt>

The participation fee is of 50 Euro. The cost of all meals and drinks will be of ca. 100 Euro.

For submissions, registration and other questions please contact us under: [pfminternational2017\(at\)gmail.com](mailto:pfminternational2017(at)gmail.com)

We hope that this initiative will interest you!

Organization Team of the Meeting PFM 2017:

Nicolaas Busscher, Uwe Geier, Gerard Hotho, Maria Olga Kokornaczyk.

Publications

In Context, The Newsletter of the Nature Institute

No. 35 Spring 2016: A day in the life of a chicory flower, *Craig Holdrege*. Of machines, organisms and agency, *Stephen Talbott*. Creativity, origins and ancestors, *Craig Holdrege*.

Editor: Steve Talbott. Single copies of *In Context* are available free of charge while the supply lasts. Contact details: The Nature Institute, 20 May Hill Road, Ghent, NY 12075. Tel: +1 518 672-0116. Fax: +1 518 672 4270. Email: [info\(at\)natureinstitute.org](mailto:info(at)natureinstitute.org). Web: <http://natureinstitute.org>. The Nature Institute's online *NetFuture* newsletter is available at <http://netfuture.org>.

Elemente der Naturwissenschaft

No. 104, 2016: Hat einführendes Beobachten Bedeutung für die Natur selbst? *Wolter Bos*. Meeting Nature-as-Presence

Aldo Leopold and the Deeper Nature of Nature, *Craig Holdrege*. Bringing the Results of Spiritual Scientific Research into Practical Life: Development of a Colour/Light Therapy, *Diana Pauli*. Goethe and Steiner as Pioneers of Emergence, *Frederick Amrine*. Phänomenologisches Denken — Die unterschätzte Bedeutung der goetheanistischen Forschungshaltung in der Biologie, *Bernd Rosslenbroich*. Brückenschläge zwischen Naturwissenschaft und geistiger Erkenntnis, *Martin Rozumek*. Ohne Goetheanismus keine Anthroposophie, *Johannes Wirz*. Gibt es eine Schwelle für die schädliche Wirkung radioaktiver (ionisierender) Strahlung? *Johannes Kühl*.

Editorial board: Ruth Richter (editor-in-chief), Johannes Wirz, Johannes Kühl, Mara Born.

Subscription enquiries to: Wochenschrift 'Das Goetheanum', Abo-Service, Postfach, CH-4143 Dornach 1, Switzerland. Email: [abo\(at\)goetheanum.ch](mailto:abo(at)goetheanum.ch). Fax: +41 61 706 4465.

Editorial enquiries to: Naturwissenschaftliche Sektion am Goetheanum, Elemente der Naturwissenschaft, Postfach, CH-4143 Dornach 1, Switzerland. Tel. +41 61 706 4210. Fax +41 61 706 4215. E-mail: [science\(at\)goetheanum.ch](mailto:science(at)goetheanum.ch).

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A list of the contents of back issues is available at <http://www.sciencegroup.org.uk/elementx.htm>.

Mathematisch-Physikalisch Korrespondenz

No. 264, Spring 2016: Was ist Spin? (I & II) Friedrich-Wilhelm Dustmann. Counterspatial thermodynamics II, *Paul C. Marx*.

No. 265, Summer 2016: Zur Interpretation von Hinweisen Steiners zu Mathematik und Physik, *Peter Gschwind*.

Edited by Prof. Dr. Peter Gschwind, Mathematisch-Physicalisches Institut, Benedikt Hugiweg 18, CH-4143 Dor-

nach, Switzerland. Tel: +41 61 701 5968. Email: [p.p.gschwind\(at\)intergga.ch](mailto:p.p.gschwind(at)intergga.ch). Subscriptions are SFr 50/€30 per year.

Wasserzeichen

Nr. 43 (2016): Wie steht unsere Arbeit zu den Wasserproblemen in der Welt? *Christian Liess*. Die Quelle des St. Landelin – Herzenswärme im Mittelschwarzwald spendend, *Christine Sutter*. Entwicklung von Verfahren zur Qualitätsverbesserung von gefiltertem bzw. gereinigtem Trinkwasser, *Manfred Schleyer*.

Plus other items on the Institute, its research, plans, conferences and financing. Price €3.00 per issue. Free to sponsors. Editors: Eva Wohlleben, Manfred Schleyer & Erhard Meißner, Institut für Strömungswissenschaften, Stutzhofweg 11, D-79737 Herrisried, Germany, Tel: +49 (0)77 64 9333 0, Fax +49 (0)77 64 9333 22.

Email: [sekretariat\(at\)stroemungsinstitut.de](mailto:sekretariat(at)stroemungsinstitut.de).

Internet: www.stroemungsinstitut.de.

Jahrbuch für Goetheanismus

English summaries for the articles in this publication from 2005 onwards are downloadable in PDF format at <http://www.tycho-brahe-verlag.de>; click 'Inhalte'; select year and click the link near the bottom of the page.

2015: Nachruf: Andreas Suchantke. 27. Juli 1933 —9. November 2014, *Johannes Kühl*. Zur Evolution des menschlichen Kopfes. Der Modus der Komplexitätsverschiebung und die Rolle von Heterochronie und Plastizität, *Susanna Kummell*. Die Blutwurz, *Potentilla erecta* (L.) Rauschel. Über die Fähigkeit, Polaritäten miteinander zu verbinden, *Ruth Manderer*, *Christoph M. Schempp*. Die Chinarinde und das atavistische Wesen des Malariaerregers. Ein Brückenschlag zwischen goetheanistischer Naturwissenschaft und geisteswissenschaftlicher Menschenkunde, *Michel Kalisch*. Das Gemüt als Pforte zur Menschenwürde, *Heinrich Brettschneider*. Urteilen in Wissenschaft und Waldorfpädagogik, *Walter Hutter*.

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Membership

The Group has 42 subscribers. The membership subscription is £5 (UK), £6 (Europe) or £7 (elsewhere).

Members who do not subscribe by direct payments from their bank receive one reminder of a due subscription.

Next Issue

This newsletter is issued to members in March and September each year. Copy for the next issue should reach the editor at the address below by 20th February 2017. Copy will be forwarded to whoever takes over the editorship from David Heaf.

Dr David J. Heaf, Hafan, Cae Llwyd, Llanystumdwy, Cricieth, Gwynedd, LL52 0SG, UK. Tel/Fax: +44 (0)1766 523181. Email: [david\(at\)dheaf.plus.com](mailto:david(at)dheaf.plus.com)

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