EASA Workshop "Advancement of Scientific Thought" Salzburg, March 6th, 2025

An interdisciplinary workshop for members of all classes of the EASA will be held in Salzburg on March 6th, 2025, i.e. the day before the forthcoming general assembly. The workshop should foster the exchange across all fields of sciences and arts.

Description of the workshop

We have chosen the theme "Advancement of Scientific Thought", which we consider of timely relevance for practically all disciplines in the various classes of the EASA. Evidently sciences have ever been influencing each other in augmenting understanding and knowledge. From time to time, certain research fields have been at the forefront of the corresponding developments. Even a historical consideration cannot always tell, however, which efforts and achievements have been preponderant and driving for the advancement of knowledge to follow. Even less is it possible to predict the impact of achievements by a particular subject on the future developments of understanding as a whole. One may recall, as an example, the appearance of the internet in physics only a few decades ago and its immediate spreading to practically all kinds of areas in human life with all its – a priori unexpected – consequences until the present.

Recently we have seen an increasing impact of machine assistance above all in learning, research, and communication. We are facing the question if this development will, as is often conjectured, revolutionize the advancement of understanding and thought. Will it outperform sooner or later the human abilities that beyond logic and induction, rely to a large extent also on qualities such as inspiration, feeling, belief, curiosity, etc.?

The workshop will focus on identifying the mechanisms governing the progresses in knowledge and thought and thus try to determine the prerequisites and chances for future developments.

Organizers

Willibald Plessas (class IV), Marko Robnik (class IV), and Ludvik Toplak (class V)

Format of the workshop

The workshop will consist of invited talks (30 – 35 minutes) on key issues and selected contributions (15 minutes) by members of the EASA with ample time for discussions. Key speakers and topics comprise:

• Rainer Blatt (University of Innsbruck): Expectations from quantum computing

- Tassos Bountis (University of Patras):
 - Curiousness, inspiration, and education in scientific research
- Kristin De Troyer (University of Salzburg):
 From data to text: How data influence the reconstruction of the biblical text
- Ioannis Liritzis (EASA Dean Class IV and University of the Aegean): History of scientific research and automatization
- Klaus Mainzer (EASA President and TU Munich): Impact of artificial intelligence on science and society
- Markus F. Peschl (University of Vienna): Redefining knowledge creation, creativity, and innovation in a radically disruptive world
- Willibald Plessas (University of Graz):
 - From observation to insight to explanation to knowledge and thought
- Marko Robnik (University of Maribor): Unpredictability in nature
- Andreas Windisch (Joanneum Research, Graz): Network science and knowledge
- Reiko Yamada (ICFO and ESMUC, Barcelona):
 Can the arts truly inspire the scientific mind? A compose

Can the arts truly inspire the scientific mind? A composer's journey in a physics institute

Time and location of the workshop

The workshop will be held during one day, on March 6th, from 8:30 a.m. to 7:00 p.m., with coffee/tea breaks in the morning and the afternoon, and a catered lunch at noon.

It will take place at the library of the University of Salzburg, Hofstallgasse 2-4, with the talks and contributions to be presented in the <u>Bibliotheksaula</u>.

Attendance and registration

The workshop is open for all EASA members to attend.

Contributions (15 minutes) fitting into the theme of the workshop are invited and will be accepted by the organizers as time allows.

Registration is required by sending the filled in data template

REGISTRATION FORM

to: workshop2025@euro-acad.eu

Deadline for registration: February 9th, 2025.

There will be no registration fee.

For any further questions you may also write informally to the above e-mail address or to Mrs. Doris Klinda at the EASA secretariat (<u>doris.klinda@euro-acad.eu</u>).