

Multiple Roles of the Austrian Academy of Sciences

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Strengthening the role of Academies in ESF

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THE AUSTRIAN ACADEMY OF SCIENCES

1. A learned society
2. An organization promoting young scientists
3. A research performing institution

The Austrian Academy of Sciences (AAS)

- Founded in 1847
- Autonomous status: legal entity under public law, "under the special protection of the Federal Republic of Austria"
- "Its mission is to promote the sciences and humanities in every respect and in every field, particularly in basic research."
- 3 major activities:
 - A learned society
 - An organisation promoting young scientists
 - **An organisation performing research:** 66 research facilities, 33 institutes, approx. 1.300 employees in research and administration

The Austrian Academy of Sciences as a learned society

	sciences	humanities	total
full members	84	78	162
corr.members, Austrian	79	73	152
corr.members, foreign	157	142	299
honorary members	9	6	15
total	329	299	628

Young Academy (founded 2006) 70 members (currently 38)
members elected for eight years, age below 45

The Austrian Academy of Sciences as an agency promoting young scientists

Seven scholarship programs for doctoral students and post-docs ...

... among them DOCfFORTE and L'Oreal Scholarships being special programs supporting women in science

The Austrian Academy of Sciences as a research institution

1200 scientists and technicians doing research in 33 institutes

- Historical aspects
- A few highlights in the last few years

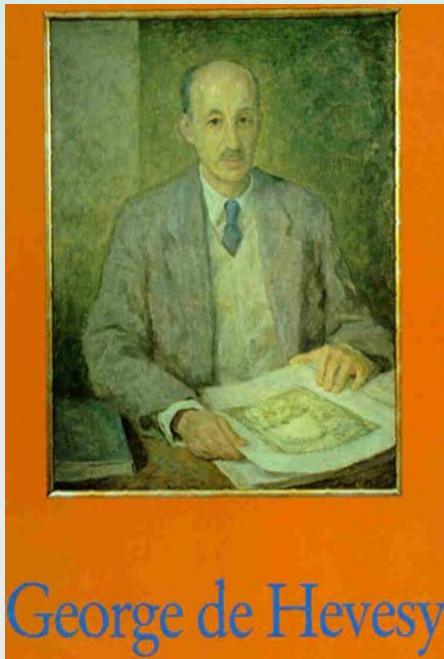
1910 ... the Institute for Radium Research
becomes the first research
institute of the AAS

Private sponsor: Dr. Karl Kupelwieser

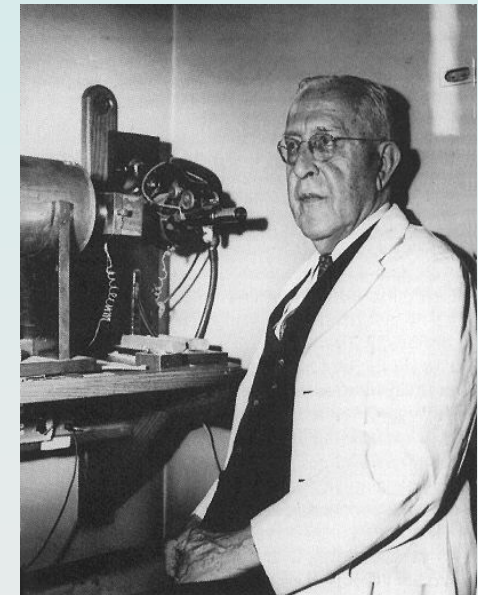


17. Institut für Radiumforschung der Wiener
Akademie der Wissenschaften (1910)

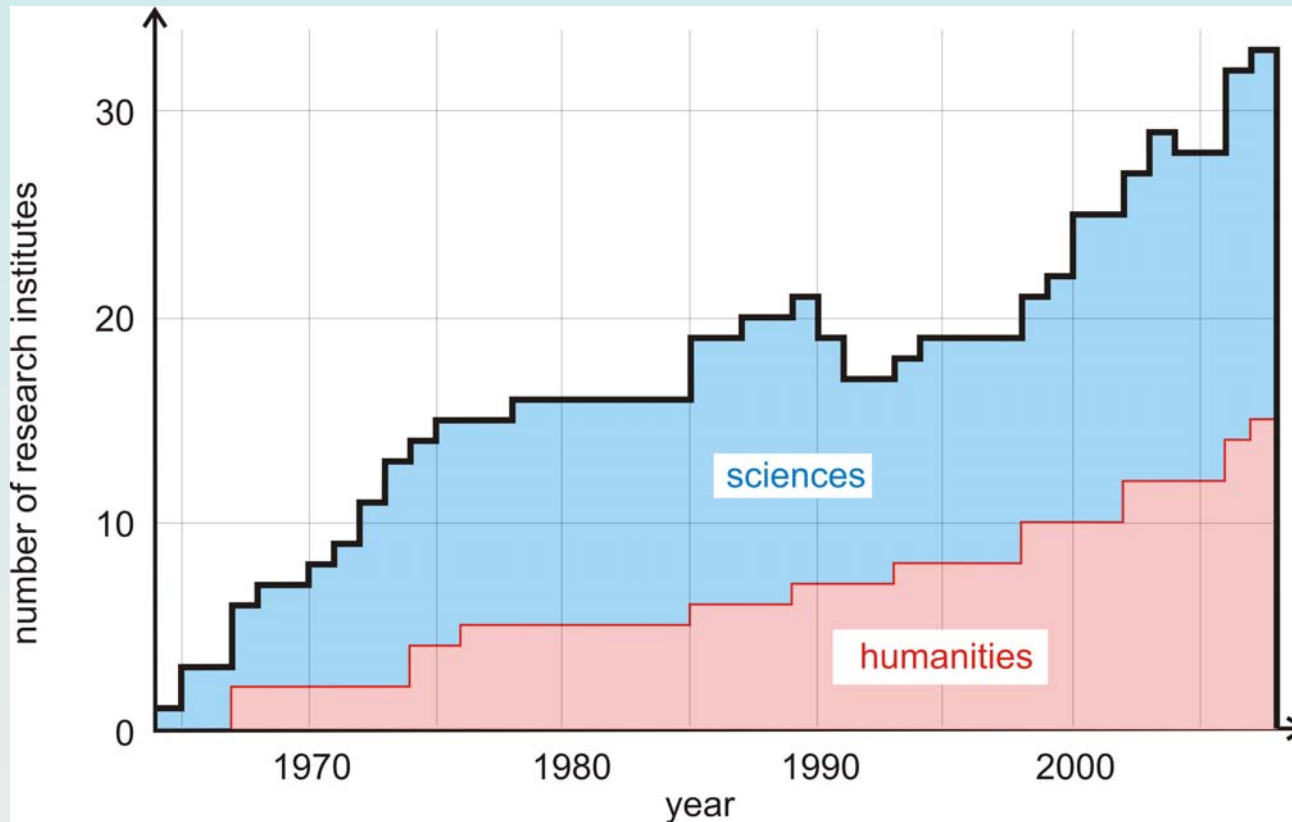
The Institute for Radium Research became an Austrian success story ...



... two Nobel prizes



Victor Franz Heß



Two phases of expansion of the ÖAW

Research at the AAS today

- **Autonomous:** oriented towards basic research – flexible
- **Heterogeneous:** covering diverse research fields and missions
- **Initiatives for new trend-setting research areas**
- **Complementary research activities (with regard to Austrian universities)**
- **Strengthening already existing excellence**
- **Room for long-term research**
- **Ensuring excellence based upon quality assessment and evaluation**

Institute for Quantum Optics and Quantum Information



Innsbruck:
R. Blatt,
H. Briegel,
R. Grimm and
P. Zoller

Wien:
A. Zeilinger

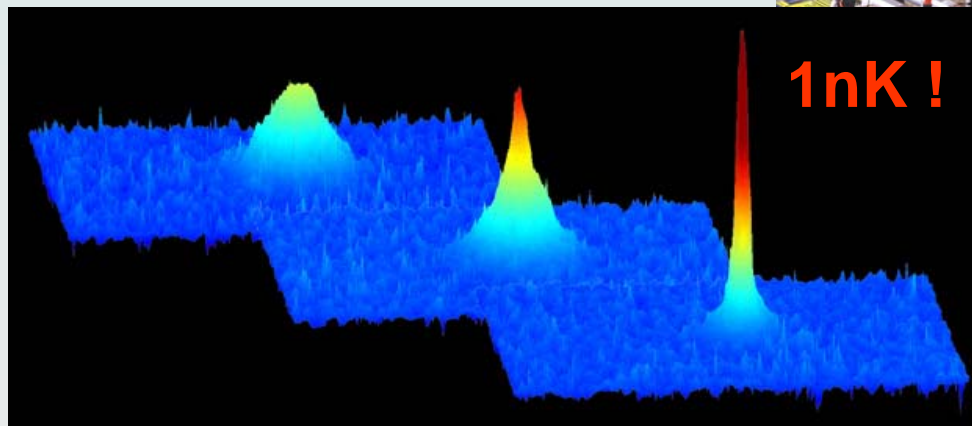
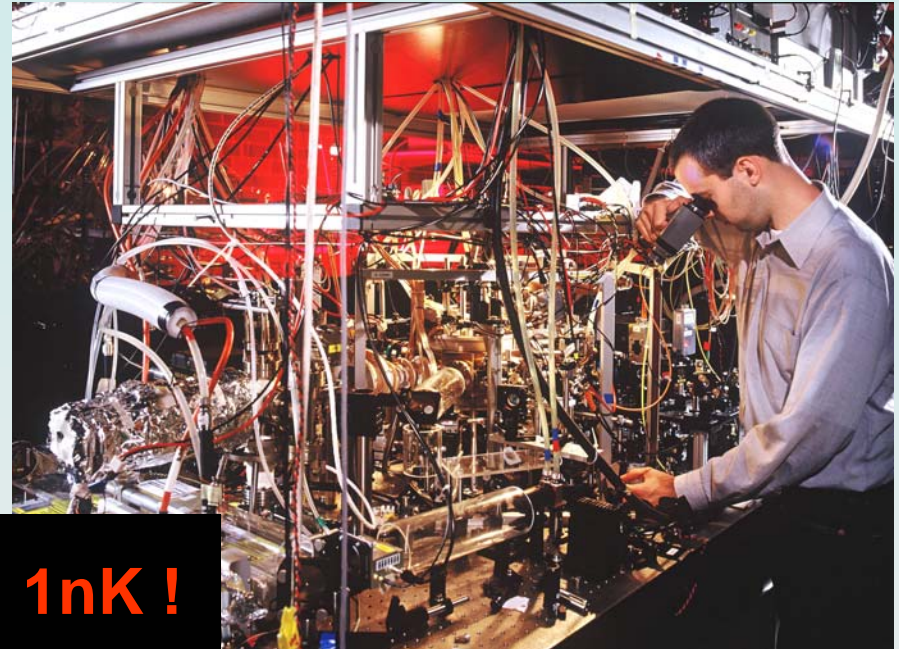


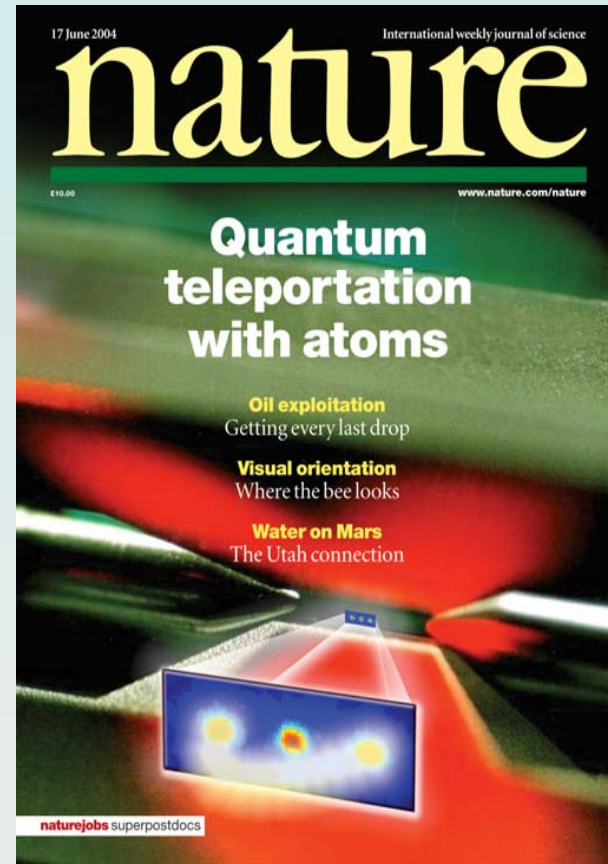
Founded by the AAS in 2003

Ultracold atoms

investigation of novel
states of matter at very
low temperatures:

„quantum gases“





Gregor Mendel-Institute for Molecular Plant Biology



Analysis of defective genes of the
'model plant'

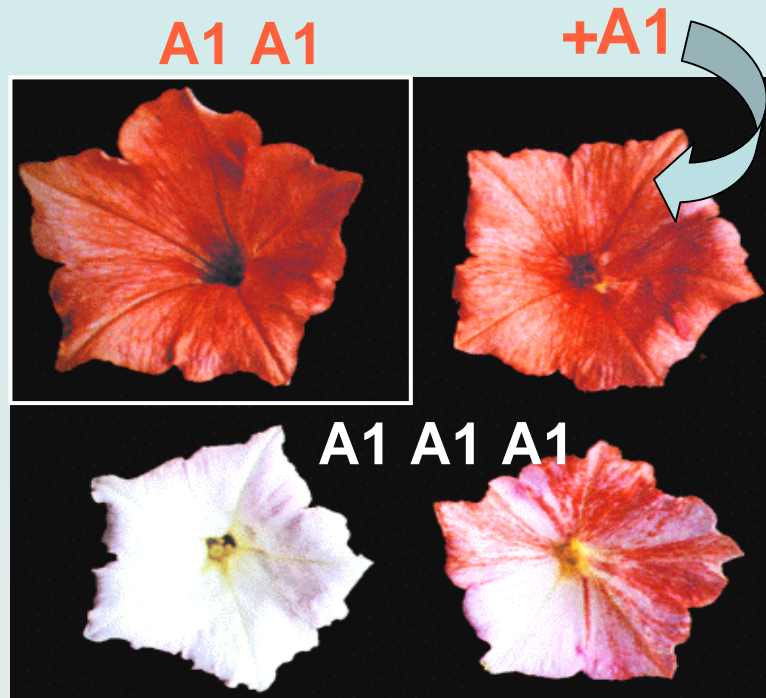
Arabidopsis thaliana

for the exploration of gene and
genome function



Founded by the AAS in 2000

two **A1**-genes
yield the red color
of the flower



additional
A1-gene

,transgene‘

three **A1**-genes:
expression of
A1-genes is
unstable

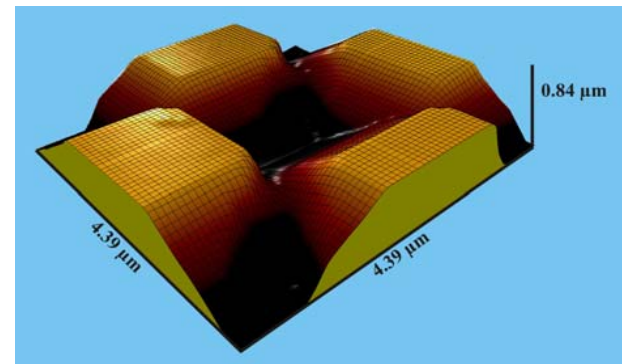
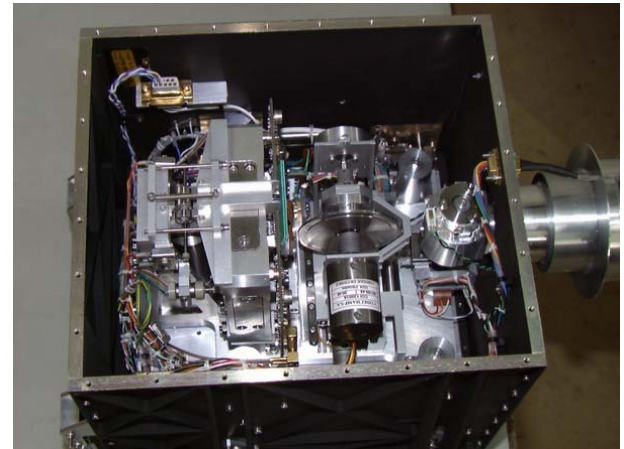
The discovery by Marjori and Antonius Matzke was a basis for
the Nobel Prize on RNA interference in 2006

Institute for Space Research of the AAS

construction of high precision instruments for
space missions

the first atomic force microscope in space

a miniature microphone to measure
weathering and storms on the Saturn
moon Titan



Institute for Biomedical Aging Research	Founded 1992
Institute for Molecular Biotechnology GmbH	Founded 1999
Research Center for Molecular Medicine	Founded 2000
Johann Radon-Institute for Computational and Applied Mathematics	Founded 2003
Institute for Studies of Iranian Culture	Founded 2003
Institute for Demography	Enlarged 2003

AAS and ESF

What the AAS can offer ESF

- expertise in quality management and organization of research,
- database of research achievements in humanities and sciences,
- cooperation in the elaboration of expert statements,
- cooperation in human capital exchange programs, and
- cooperation in the identification of primary goals for future research.

What the AAS expects from ESF

- to work out Europe-wide accepted elements of scientific quality control and criteria for evaluations in different disciplines,
- to define the characteristics of a common European science culture,
- to take an dominant role in shaping the common scientific landscape of Europe in the future,
- to identify the problems to be encountered on the way towards a common European research funding strategy and agency, and
- to make suggestions and efforts to reduce bureaucracy in European research funding.

ESF and the Future of Learned Publishing

- Investigate consortia "bulk deals" – support small publishers, look for **cooperative solutions (eg. ALPSP)**

ALPSP is the international trade association for nonprofit publishers and those who work with them.

- ALPSP was formed in 1972. Today it is the only international trade association representing all types of nonprofit publishers, and is the largest trade association for scholarly and professional publishers. It has more than 360 members in 36 countries, publishing scholarly content in many different ways. Over 10,000 journals are published by ALPSP members as well as numerous books, reports, databases and other products and services.
- Membership of ALPSP has been taken up by a wide range of different types of publishers - journal publishers, book publishers, learned societies and professional bodies, database publishers, university presses and intergovernmental organizations. The variety and range of the 260+ publisher members and the 100+ associate members who provide services to the sector provides a unique network serving the interests of scholarly publishing worldwide.
- ALPSP's mission is to play an active part in shaping the future of academic and professional communication, promoting 'Scholarship-Friendly Publishing'. At this time of unprecedented change in the publishing environment, we believe that nonprofit publishers have a unique role to play. We therefore aim to serve, represent and strengthen the community of scholarly publishers, and those who work with them.

THANK YOU FOR YOUR ATTENTION !