

Press release

European research funding

Two Advanced Grants for ETH

Zurich, 22 April 2021

The European Research Council has decided on the recipients of its lucrative Advanced Grants. Researchers at ETH Zurich were awarded two grants – one in political science and the other in climate research. ETH is set to receive around CHF 6.6 million.

Two researchers at ETH Zurich – atmospheric physicist Ulrike Lohmann and political scientist Frank Schimmelfennig – have each been awarded an Advanced Grant by the European Research Council (ERC). Their projects received CHF 3.8 million and CHF 2.8 million, respectively.

An uncertain future

This year's Advanced Grants were awarded as part of the EU's Horizon 2020 research and innovation programme for the final time. It remains to be seen whether and to what extent Switzerland will be involved in Horizon Europe, its successor programme. "Switzerland and the EU have benefited from a long, successful partnership in research and innovation," states Detlef Günther, Vice President for Research at ETH. "Cooperation becomes more important than ever in times of crisis. I therefore hope that Switzerland will continue to be able to participate in the European framework programme and remain a fully associated partner."

A dozen grants for Switzerland

In this round, the ERC awarded a total of 209 grants worth more than EUR 500 million to 49 female researchers and 160 male researchers. The United Kingdom leads the way with 51 grants, followed by Germany with 40 and France with 22. Twelve Advanced Grants went to researchers working at institutions in Switzerland – this is down from 16 in the previous year.

The projects at a glance:

Ulrike Lohmann, a professor for Experimental Atmospheric Physics, focuses in her research on the role of aerosol particles and clouds in the climate system. Her specific interest is to gain a better understanding of the cloud microphysical processes leading to precipitation in clouds involving ice. The

ERC advanced grant will tackle this problem by injecting ice nucleating particles from a drone into supercooled stratus clouds to investigate related microphysical changes, including fundamental aspects of ice formation and growth. The project combines a multi-dimensional approach of targeted cloud seeding with a focus on wintertime stratus clouds in Switzerland. The researchers will use the analysis of their cloud seeding events to validate and improve the cloud microphysics scheme in the Swiss weather forecast model and ultimately precipitation forecasts. In addition to pioneering of a new methodology of using drones for cloud seeding, their results will be important to quantify consequences of artificial weather modification and climate interventions.

Frank Schimmelfennig is Professor of European Politics at the Department of Humanities and Social Sciences. His research group studies the politics and dynamics of European integration. The ERC project on 'Bordering Europe: Boundary Formation in European Integration' starts from the observation that the European Union's recent crises – from the euro crisis to the Corona pandemic – have originated at and put at stake the borders of the EU. Moreover, European integration is under pressure from geopolitical shifts in its neighbourhood and beyond. Yet current theories of European integration focus almost exclusively on internal developments and boundaries between the member states. The ERC project therefore aims to develop and test a novel 'bordering theory', which explains how external boundary developments affect integration. It examines how boundary configurations and cross-border transactions shape the internal political developments of the EU, and how boundary policies are negotiated in the EU.

Further information

ETH Zurich
Media Relations
Tel.: +41 44 632 41 41
mediarelations@hk.ethz.ch

Benchmark for top researchers: ERC Grants

ETH researchers have been successfully applying for EU funding – ERC Research Grants – since 2007. More than 80 researchers at ETH Zurich have received an ERC Advanced Grant. In addition to the Advanced Grants, the European Research Council also annually awards Starting Grants to young researchers at the beginning of their careers and Consolidator Grants to more established researchers to further develop their own group. Furthermore, the numerous ERC Proof of Concept Grants (funding for the preparation of feasibility studies and business plans) awarded to ETH Zurich show that basic research is often used in market innovations with corresponding economic benefits.