universität wien

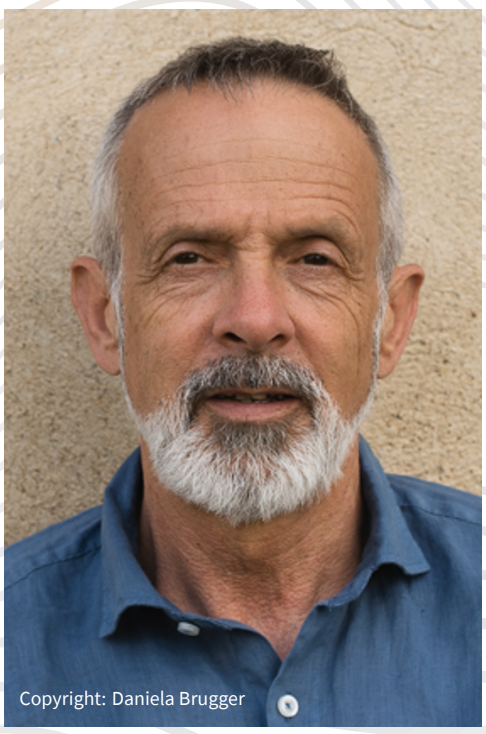
ESI

Erwin Schrödinger Lecture

Georg Kaser / Department of Atmospheric and Cryospheric Sciences, University of Innsbruck

Our changing climate system

Wednesday, March 8, 2023, 17:00
Boltzmann Lecture Hall
Erwin Schrödinger Institute



Copyright: Daniela Brugger

Georg Kaser is a glaciologist and climatologist at the University of Innsbruck, Austria. His research interests include mass and energy balances on glaciers, fluctuations of climate and glaciers, glaciology, climatology and hydrology in tropical mountain regions, fresh water availability and demand and global glacier mass change and drivers. Georg Kaser has served as lead author for the IPCC climate report and currently he is vice president of the Austrian Science Fund FWF.

Abstract

Climate change is ongoing. Both insidious changes such as sea level rise or vector migration and the increase of extreme events in their frequency as well as their intensity are evident. Extensive detrimental impacts and related costs will occur in the targeted +1.5°C World and even more so if we get to +2°C above pre-industrial levels. It is all but sure that we will be able to meet this “Paris agreement” at all. Global greenhouse gas emissions are higher than ever and they increase further. There are first indications of the onsets of several irreversible subsystem changes that may both individually or in cascades cause positive feedbacks leaving us without any further chance to counteract. There is still a small window open for action, yet it requires an immediate and deep transition of the global society.

The Erwin Schrödinger Lectures are directed towards a general audience of mathematicians and physicists. In particular it is an intention of theses lectures to inform non-specalists and graduate students about recent developments and results in some area of mathematics or physics. The lecture will be followed by a reception.

Boltzmanngasse 9/2, 1090 Vienna, Austria

ESI
Erwin Schrödinger International Institute for Mathematics and Physics
www.esi.ac.at