Program of the Open Science Day

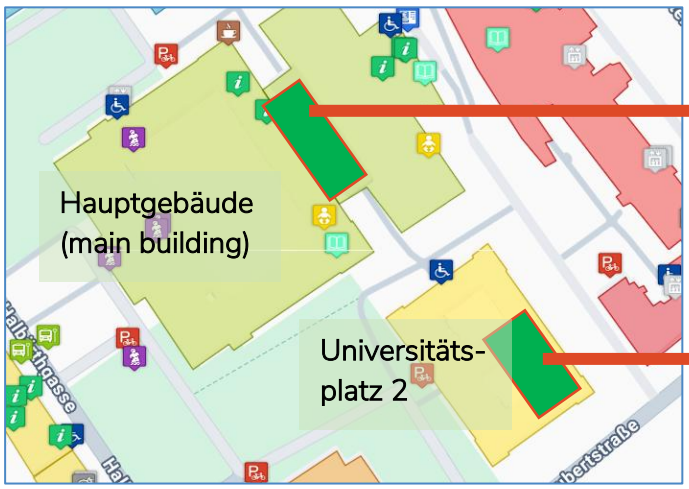
June 12, 2025

Registration:

> https://www.tinyurl.com/OSDgraz26

> sign up and get a **free lunch bag** for the lecture

Locations:



University Library Foyer (Atrium)

> Afternoon Networking & Snacks
> Meeting point for the workshops

HS 02.23
Universitätsplatz 2, 3rd floor

> Kick-off talks (10.00)
> Keynotes and panel discussion (11.30)

Kick-off Talks (HS 02.23, 10.00-11.15)

Korda & Pizka: Reproducibility and FAIR Data

A recent large-scale project in the Social and Behavioral Sciences showed that only half of the research results in scientific articles can be reproduced when independent researchers analyzed the same data. We will argue that to increase reproducibility, researchers are advised to share their data, analysis code, and metadata on repositories like the Open Science Framework.

Blumesberger: Science Communication and Citizen Science

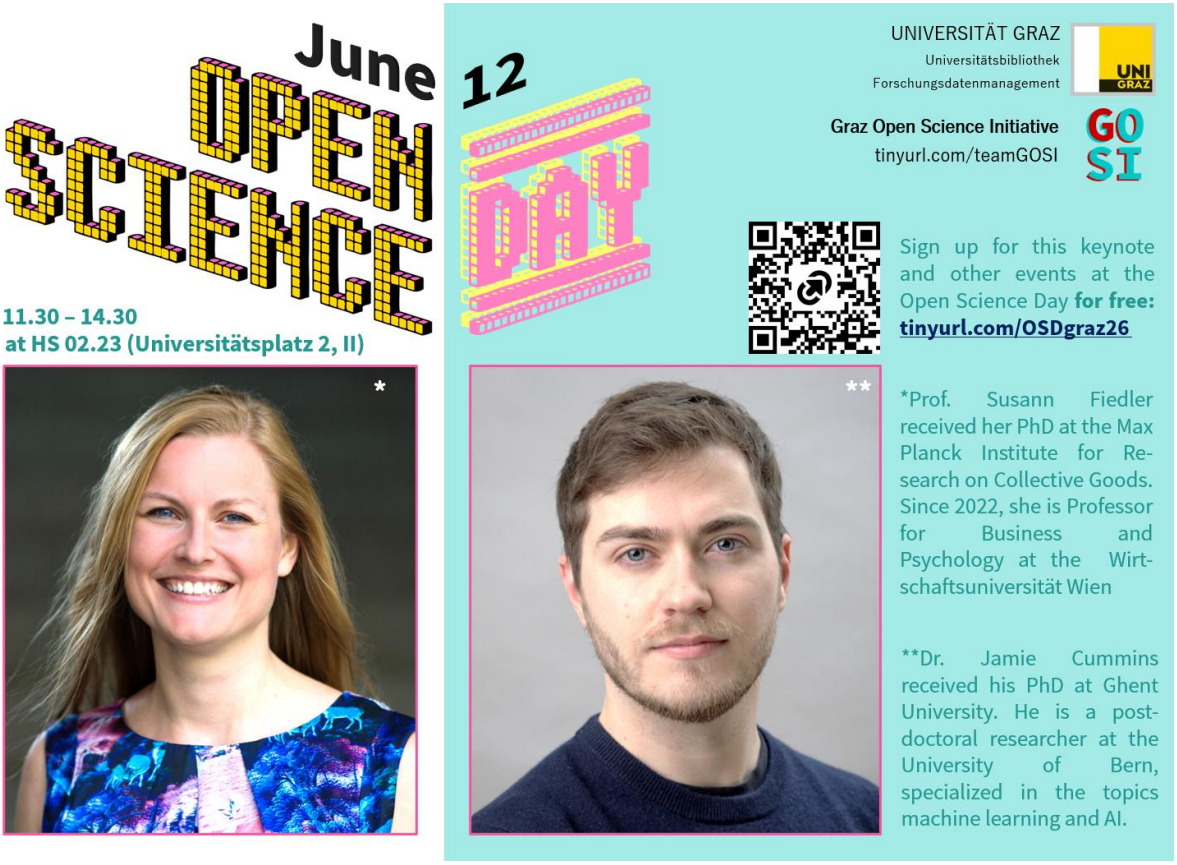
TBA

Klug: Open Science at the University of Graz

To implement its development strategy, the University of Graz has launched 10 flagship projects since 2023, each dedicated to different strategic themes. Flagship Project 2 focuses, among other things, on the topic of Open Science. Based on the university's development plan, the performance agreement, and other guidelines, Open Science is part of the university's guiding principles and should be strengthened in general. Related actions aim not only to further strengthen traditional Open Science areas (Open Access, Open Data, pre-registration, etc.), but also to establish a university wide Open Science mindset based on a sustainable research foundation. To realize this vision, the University Library has in recent years carried out numerous initiatives that address relevant Open Science topics. This presentation will provide an overview of these initiatives and will also outline future goals.

Keynotes & Panel Discussion

(HS 02.23, 11.30-11.15)



Fiedler: Making Theories Clearer: From Ideas to Testable Statements

A key obstacle to progress in psychology is that many theories are not clearly specified. Important concepts are often described in words, but their meaning, boundaries, and relationships remain vague. This makes theories difficult to test, compare, and build on, contributing to fragmented findings and limited cumulative progress. In this talk, I present a practical approach to making theories more precise and usable. The idea is to translate verbal descriptions into clear, structured statements that specify what concepts mean, how they are related, and under which conditions predictions should hold. This reduces ambiguity, makes assumptions explicit, and allows theories to be tested and compared more directly. I will illustrate how this approach can be applied to both classic and contemporary theories, and present evidence that different researchers arrive at highly similar results when using a shared structure. This suggests that clearer theory specification can help improve consistency, comparability, and cumulative knowledge in psychological science.

Cummins: ERROR

Science is self-correcting; at least, in principle. In practice, errors are often treated as individual failures rather than as normal and informative parts of knowledge production. Consequently, the processes of correcting errors in science are currently infrequent, opaque, and taboo. This talk introduces the ERROR project, a bug-bounty program for scientific errors which aims to normalize the process of checking errors in scientific research. I will discuss the progress of ERROR to date, the bottlenecks we have experienced in deploying the paid error-checking at scale, and the solutions we are currently examining to secure a more sustainable, long-term means of normalizing and destigmatizing errors in science.

These keynotes will be followed by an **Interdisciplinary Panel Discussion** with the keynote speakers, Prof. Leonhard Grill (Physical Chemistry), Dr. Thomas Klebel (Idea_Lab), and Dr. Nicki Lisa Cole (Know-Center)


Cole

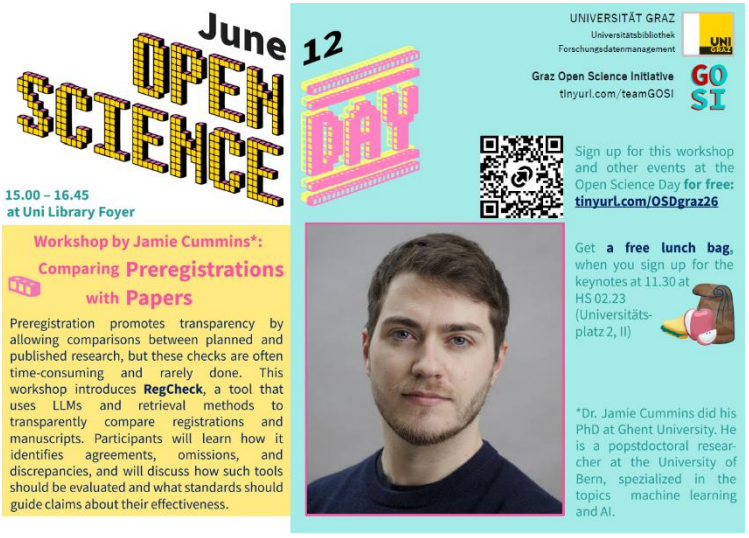

Klebel

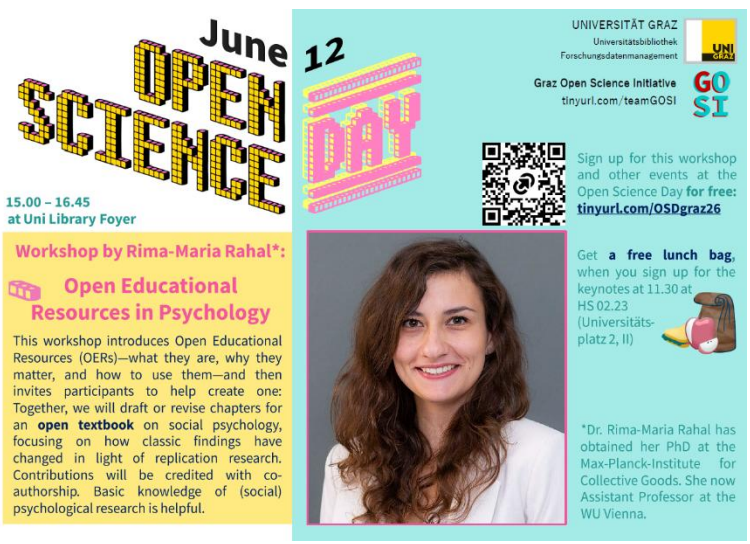

Grill


Fiedler


Cummins

Workshops (University Library Foyer, 15.00-16.45)





Choose one of the three workshops and register for it here:
https://www.tinyurl.com/OSDgraz26

Rahal: (Re)Writing the Book - Open Educational Resources (OER) in Psychology

Researchers and decision-makers of tomorrow need training that is grounded in open science. However, in psychology in particular, an area severely affected by the replication crisis, adapted teaching formats are rarely available. Textbooks are generally not available in open access formats and remain largely silent on the controversy surrounding the robustness and reproducibility of psychological research.

In this workshop, our first goal is to understand what OERs are, what they are good for and how to use them. Our second goal will be contributing to creating an OER. In this knowledge co-production process, we will work on a textbook that documents shifts in the field of social psychology and revisits classic studies in light of recent replication efforts. Participants are invited to work together to draft or revise chapters of an open textbook for undergraduate education. The goal is to provide short descriptions that are easy to follow and outline changed perceptions of classical social psychology findings in the light of replication attempts. Contributing to this hackathon by drafting or revising a chapter will be credited with co-authorship of the relevant chapter. Some basic knowledge about (social) psychological research is plus for an effective contribution.

To illustrate the idea, please find the set-up of the book and a sample chapter here: https://forrt.org/open-social-psychology/

Klug: Open Science Card Game

The Open Science Card Game is a derivate of the “Open Loves Science” game (originally by the GHOST Collective), and is meant to provide an easy and low threshold introduction to the endless expanses of Open Science. It is meant to introduce relevant concepts and facts in a playful way. This is done by providing general Open Science topics and Open Science facts that should be matched in the end. In this workshop we will present the card game, outline its scope and compare it to its base version. We will introduce our way of playing the card game. We want to use the workshop to fine-tune our cards, our rules, and we want to use the collective creativity of the group to imagine other implementation scenarios than Open Science classes as we believe in the power of this simple game.

Cummins: RegCheck:

One of the core values of preregistration is that it makes decisions transparent, and provides a record that readers and reviewers can compare against the corresponding published work for consistency. However, such comparisons are often slow, effortful, and difficult to do; consequently, they are infrequently done. Although automated tools may help with this in principle, we need to ensure that these tools are themselves transparently and robustly developed and evaluated. This workshop introduces RegCheck, a tool designed to support structured comparisons between registrations and manuscripts using large language models and retrieval-based methods. Participants will see how RegCheck can be used to identify and document agreements, omissions, and discrepancies across key dimensions such as hypotheses, sample size, outcomes, and analyses. The workshop will also focus on discussion of how such tools can and should be evaluated, and the criteria that we should consider when making claims about their effectiveness.