

SAFE poster presentations

11 June 2026, Paris

Poster gallery showcasing SAFE fellows' research

Disclaimer

Funded by the European Union. Views and opinions expressed are however those expressed by the participants during the SAFE seminar and do not necessarily reflect those of the European Union or the European Education and European Executive Agency for Research (REA). Neither the European Union nor REA can be held responsible for them.

Between Worship and Social Cohesion: The Role of Mosques and Muslim Leadership in Spain

Name of the fellow: Ziad Alahmad
Host institution: Universidad Autónoma de Madrid

PROJECT OVERVIEW

- ◆ This project examines the role of mosques in the (dis)integration of Muslim communities in Spain.
- ◆ Drawing on interviews with Imams and Mosque Board Members, the study explores how mosques function as both places of worship and community support hubs.
- ◆ Preliminary findings suggest that mosques actively promote positive interaction with wider Spanish society; however, their impact is often constrained by structural, organizational, and financial barriers.

OBJECTIVES

- ◆ Examine how mosques influence integration and social cohesion in Spain.
- ◆ Explore the role of Muslim leadership in fostering dialogue and civic engagement.
- ◆ Identify enabling factors and barriers affecting mosque activities.
- ◆ Generate evidence-based insights for policy and practice.

METHODOLOGY

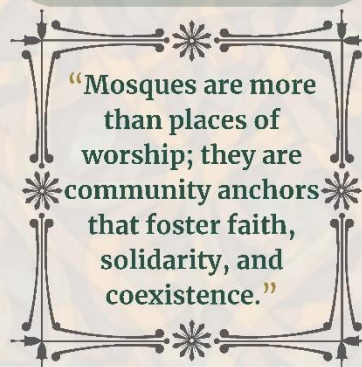
- ◆ **Qualitative Approach**
Semi-structured interviews with: Imams and Mosque Board Members.
- ◆ **Data Collection**
Original primary data collected through in-depth interviews.
- ◆ **Data Analysis**
Thematic analysis used to identify: recurring patterns leadership practices integration strategies institutional challenges
- ◆ **Scope**
Mosques of different sizes and organizational structures in urban and peri-urban areas.

PRELIMINARY FINDINGS

- ◆ **Social Support Hubs**
Mosques provide language support, youth activities, counselling, charity initiatives, and assistance to vulnerable families.
- ◆ **Bridge-Builders**
Many mosques actively encourage dialogue, interfaith initiatives, and collaboration with local institutions.
- ◆ **Community Cohesion**
Mosques strengthen belonging, trust, and social participation while preserving religious and cultural identity.
- ◆ **Structural Constraints**
Limited resources, administrative barriers, and unstable funding reduce institutional capacity and outreach.

KEY CHALLENGES

- iii Legal and administrative procedures affecting recognition and development.
- 5 Financial constraints and limited access to sustainable funding.
- Dependence on volunteer labour and limited organizational capacity.
- Public stereotypes and occasional stigmatization affecting outreach efforts.



CONTRIBUTION

- ✓ Advances understanding of the role of religious institutions in integration processes.
- ✓ Highlights the contribution of Muslim leadership to social cohesion in Spain.
- ✓ Demonstrates how mosques operate as both religious and civic actors.
- ✓ Provides evidence for policymakers and practitioners working on inclusion and diversity.



PhD Researcher: Mahmood Alhosain
Radboud University -Netherlands
Mahmood.alhosain@ru.nl

Title

Universities during Violent Conflict
Responses of Syrian Universities to Regime Securitization

Context

- Securitization of Syrian universities over the last decade
- The post-December 2024 collapse of the Syrian regime as a unique research opportunity
- Lessons learned for universities in the Global South
- Insights for institutions facing democratic backsliding in the Global North

Objectives

- Investigating universities' responses to securitization processes during the Syrian conflict
- Exploring how the Syrian regime securitized universities before and throughout the 2011-2022 conflict
- Understanding universities' responses to securitization processes

Methodology

Approach: Qualitative case-study
Data Collection: KIs and Document Analysis

Key Variables

IV: Securitization Process
DV: Responses of Universities towards the securitization process

Expected outcomes

- Dissertation manuscript
- Book publication with a university press
- Policy analysis outputs
- Op-ed publications in international media outlets

Model Building: Physics Beyond the Standard Model

Mohammed Khojali, Université Lyon 1, IP2I

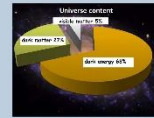
Overview

- All known matter is composed of fundamental particles. The Standard Model (SM) successfully describes their properties and interactions.
- However, the SM is widely regarded as an effective low-energy theory, as it does not address several key issues:
 - Dark matter, the flavor problem, and gauge coupling unification
 - The hierarchy problem, gravity, and the cosmological constant problem



Physics Beyond the SM: Dark Matter

- Although significant progress has been made in understanding the structure of the Universe, key components remain unexplained. In particular, the existence of dark matter (DM) provides strong evidence for physics beyond the Standard Model.



- We investigate a spin-3/2 dark matter candidate coupled to neutrinos, which can account for the observed relic abundance via the thermal freeze-out mechanism:

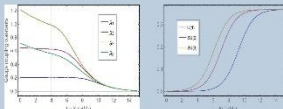
– M. Khojali et al., Eur. Phys. J. C 77 (2017) 25; Eur. Phys. J. C 78 (2018) 920; Eur. Phys. J. C 82 (2022) 1002.

- We also consider an extension of the Standard Model that includes an inert Higgs doublet and a real scalar singlet.

– M. Khojali et al., Phys. Rev. D 106 (2022) 095039.

Physics Beyond the SM: GHU

- One way to resolve the Higgs vacuum stability in the Higgs sector is the Gauge Higgs Unification model.
- The one loop renormalization group equations (RGEs) are computed in a five dimensional framework compactified on S^1/Z_2 to analyze the gauge Higgs unification (GHU) model.
- We found that the gauge couplings unify asymptotically at high energies.



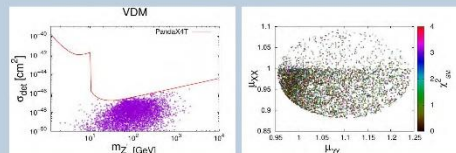
– M.Khojali, et al, Phys.Lett.B 776 (2018) 231-235.

Current Research (manuscript in preparation)

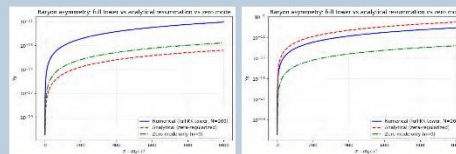
- We extend the electroweak gauge sector of the Standard Model to $SU(2)_L \times SU(2)_H \times U(1)_1 \times U(1)_2$.

- The parameter space is subject to various theoretical and experimental constraints.
- A Python code is used to perform parameter scans.

- The direct detection cross section σ_{det} as a function of the dark matter mass is shown in the left panel below. The right panel displays the signal strengths $\mu_{\gamma\gamma}$ and μ_{XX} , with the color scale indicating the total chi-squared χ^2_{SM} .



- We also investigate $SO(10)$ asymptotic grand unified theories (aGUTs) in five dimensions compactified on an orbifold, aiming to explain baryogenesis. The figures below show the resulting baryon asymmetry for different values of the compactification radius R and the coupling λ .



SAFE Networking Event

June 11, 2026, INALCO, Paris

Redesigning the Ivory Tower: International Projects as Drivers of Higher Education Transformation

Tetiana Konovalenko

Riga Technical University (Latvia), Bogdan Khmelnytsky Melitopol State Pedagogical University (Ukraine)

The research **aims** to systematize and evaluate the transformation processes that have taken place in contemporary higher education in the EU and Ukraine under the influence of international projects.

Research **methodology** is based on literature review, policy and legislative documents analysis, needs assessment, data collection and impact analysis (project databases, SWOT-analysis, interviews, surveys), data synthesis, comparative analysis, and modelling.

The **practical results** are expected to comprise the guidelines for upscaling professional networking in education and starting new projects aimed at improvement of higher education in the EU and Ukraine, its internationalization and visibility of Ukrainian education and science.

I am open for cooperation. Please email to
konovalenko_tetiana@mspu.edu.ua

The Ivory Tower Syndrome describes a disconnect where leaders, executives, or academics become isolated from the realities of daily operations. Insulated in their "towers," they make top-down decisions that look perfect in theory but fail miserably in practice – frustrating innovative educators, researchers and out-of-the-box thinking students.

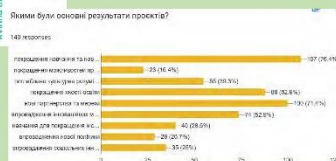


What extent and what way have the international projects contributed to the transformation of HE?

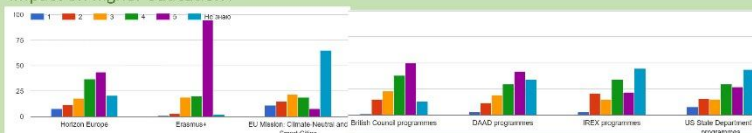
How the experience of implementing international projects can improve various areas of HE?

What opportunities do the international projects give to make HE in Ukraine and Latvia more visible and competitive in the European and world higher education area?

Grant programmes and funding



Please take part in this survey to share your experience of participating in international projects that have had/are having the impact on higher education .



Intestinal macrophage development in Chronic Granulomatous Disease (CGD)

Khyber Shinwari

University of Freiburg, Freiburg, Germany

1. Background & aim

CGD. An inherited immune disorder caused by impaired NADPH oxidase activity and reduced ROS in phagocytes.

Gap. In DSS colitis, p47phox^{-/-} mice show a Ly6C/MHC-II⁺ LOW/DN population by FACS.

Aim. Define these double negative identity and disease relevance.

2. Current workflow



Completed: mouse models, intestinal cell isolation, FACS, and integrated scRNA-seq/bulk RNA-seq analysis.

3. Study design

Mouse model

DSS colitis

Groups: WT/p47phox^{-/-} controls and DSS colitis.

Tissues: small intestine and colon.

Readouts: FACS + RNA-seq integration.

4. Next steps & expected outcome

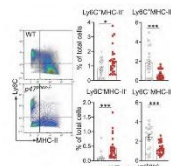
Validation. Expanded FACS panels, cell sorting, RNA-seq integration, and marker-gene confirmation.

Expected outcome. A validated marker panel and cell-state definition for Low/DN

Take-home. LOW/DN cells may represent a disease-associated intestinal macrophage state in CGD colitis.

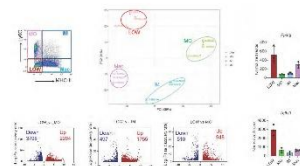
Results: LOW/DN cell identity

FACS phenotype



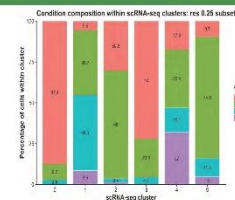
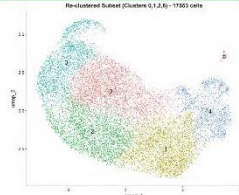
Ly6C/MHC-II gating indicates altered macrophage-related populations in p47phox^{-/-} mice. Dr Zohreh

LOW/DN cells



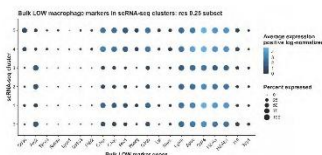
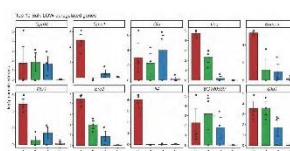
LOW/DN events separate from canonical macrophage and inflammatory monocyte gates. Dr Zohreh

Integrated scRNA-seq analysis



Re-clustering and condition-composition analysis maps LOW/DN signatures across scRNA-seq clusters.

Transcriptomic prioritisation



Bulk RNA-seq and marker dot plots prioritize inflammatory and macrophage-differentiation genes for validation.

Selected references

Mansoori Moghadam Z et al. *Blood* 2025; Delfini M et al. *Immunity* 2022; Rivollier A et al. *J Exp Med* 2012; Bain CC & Schridde A. *Front Immunol* 2018.

Evaluation and Projection of Climate Change Impacts in the Kielstau Catchment using Bias-Corrected CMIP6 Models

Kyi Pyar Shwe, Nicola Fohrer

Introduction:

The **Kielstau catchment** (50 km²) is a representative lowland watershed in **Schleswig-Holstein**, Northern Germany, characterized by:

- Hydrology:** Strong groundwater-surface water interactions and extensive tile drainage.
- Land Use:** Predominantly agricultural (pasture and arable land).
- Climate Sensitivity:** Highly vulnerable to changes in precipitation and temperature patterns.
- Aim:** Assess climate impacts on regional water resources using CMIP6 scenarios.

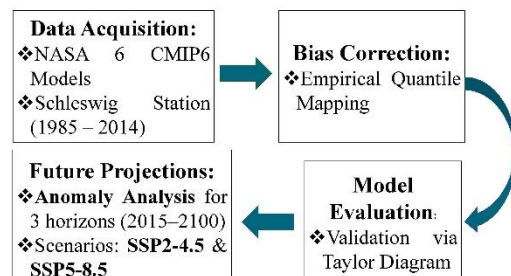


Figure 1: The study area located in Northern Germany. The red star indicates the Schleswig station used for local bias correction of CMIP6 climate data.

Objectives

- Evaluate CMIP6 model performance in capturing local climate characteristics of the Kielstau catchment.
- Improve data reliability by applying Empirical Quantile Mapping bias correction using the Schleswig station as a reference.
- Project future changes in precipitation, T_{max} , and T_{min} across three time horizons: 2015–2100 under SSP2-4.5 and SSP5-8.5 scenarios.

Methodology



This project has received funding through the SAFE - Supporting At-risk Researchers with Fellowships in Europe project, which is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, the European Research Executive Agency (REA), Neither the European Union nor the granting authority can be held responsible for them.

Kyi Pyar Shwe, kpshwe@hydrology.uni-kiel.de, kypyars@gmail.com

Abteilung Hydrologie und Wasserwirtschaft | Institut für Natur- und Ressourcenschutz | Christian-Albrechts-Universität zu Kiel | Olshausenstr. 75 | D-24118 Kiel

Model Evaluation (Taylor Diagram)

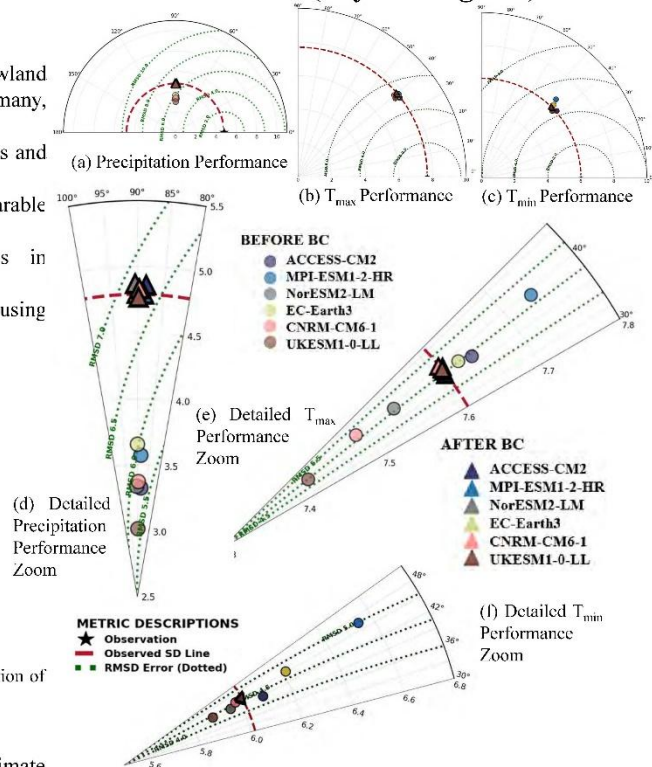


Figure 2: Performance Evaluation and Bias Correction of CMIP6 Models

Climate Projections

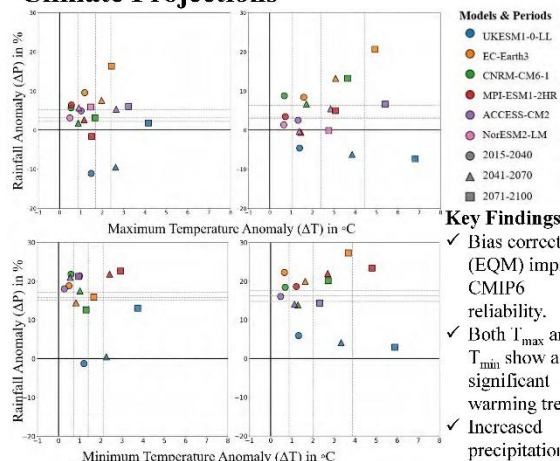


Figure 3: Climate Anomaly: (a) SSP2-4.5 (b) SSP5-8.5

Key Findings:

- ✓ Bias correction (EQM) improved CMIP6 reliability.
- ✓ Both T_{max} and T_{min} show a significant warming trend.
- ✓ Increased precipitation variability through 2100



Kyi Pyar Shwe, kpshwe@hydrology.uni-kiel.de, kypyars@gmail.com

Abteilung Hydrologie und Wasserwirtschaft | Institut für Natur- und Ressourcenschutz | Christian-Albrechts-Universität zu Kiel | Olshausenstr. 75 | D-24118 Kiel



Supporting At-risk researchers with Fellowships in Europe



Funded by the European Union



Deutscher Akademischer Austauschdienst
German Academic Exchange Service



CASTLES AND THEIR INHABITANTS IN THE LATE MEDIEVAL NORTHERN BLACK SEA REGION LIFESTYLE, ECONOMIC ACTIVITY, AND SOCIAL BEHAVIOUR THROUGH ARCHAEOLOGICAL EVIDENCES

Iryna TESLENKO

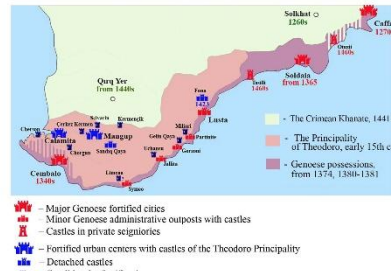
The National Archaeological Institute with Museum at the Bulgarian Academy of Sciences; iryna.teslenko@naim.bg



The beginning of the castle's construction as fortified structures combined with the residence of the noble in the Northern Black Sea region and Crimea dates back no earlier than the late 14th – early 15th c., significantly later than in the main European territory and the Eastern Mediterranean.

Their emergence was primarily associated with the Genoese, who established their outposts in Crimea at the end of the 14th century, and later with the strengthened local elite against the backdrop of the decline and eventual demise of the Byzantine Empire, the gradual disintegration of the Ulus of Jochi, and the expanding influence of the young Ottoman state.

These structures became a peculiar phenomenon of the era, emerging on the north-eastern edge of Mediterranean civilization at the end of the Middle Ages and lasting for a short time until the Ottoman invasion in the last quarter of the 15th century.



Research Questions: Despite their remarkable nature, local castles remain poorly understood. Special studies cover only fortification architecture and military functions of some Crimean castles and Moncastro in the mouth of the Dniester River (Kirilko, Myts 2004; Kirilko 2005; Myts 2009; Bocharov 2015). Nevertheless, the everyday life, economic activity, and social behavior of their inhabitants, as well as the evolution of the historical landscape under the influence of castle construction have been largely neglected. The reason also lies in the fact that written sources on the subject are either absent or very spotty. Meanwhile, quite a lot of archaeological data has already been accumulated to shed light on these issues.

Aims of the Project: This project focuses on a multifaceted study of regional castles, drawing on materials from excavations and explorations in Southern Crimea conducted with my participation and under my direction from 1993 to 2013, as well as on Ukrainian museum collections I have extensively studied. During 2026–2027, my research will focus specifically on the well-excavated but still understudied Funa Castle and its surrounding archaeological landscape.

CAFFA

SOLDAIA

CEMBALO

GENOESE CASTLES 1340s–1475

THEODORO CASTLES 1420s–1460s–1475

architectural and administrative heart of fortresses

ITALIAN SEIGNEURIES in CRIMEA

Di Guasco family's Castle TASILI, 1460s–1475

MANGUP

CALAMITA

FUNA

Expected results: I expect to clarify the specifics of the lifestyle, social behavior, and economic activity of late 14th- to 15th-century Northern Black Sea castles within a broader European context, with an emphasis on the Balkan, Eastern Mediterranean, Caucasus, and Anatolian cultural backgrounds. The outcome of the research will be papers in international refereed journals and conference proceedings, as well as the English-language monograph "Funa Castle and its Inhabitants," which will be the first in the series "Castles in the Late Medieval Black Sea area" that I would like to initiate. Furthermore, the project offers promising prospects for future international, interdisciplinary research on late medieval archaeological sites in the Pontic region. In particular, it will be possible to expand our interdisciplinary study of the Black Sea castles and other local fortifications, as well as Genoese and nomadic trading stations in the Danube, Dniester, and Dnieper river basins, and the largest medieval fortress in this area, Moncastro/Akkerman, in the Odesa Region.