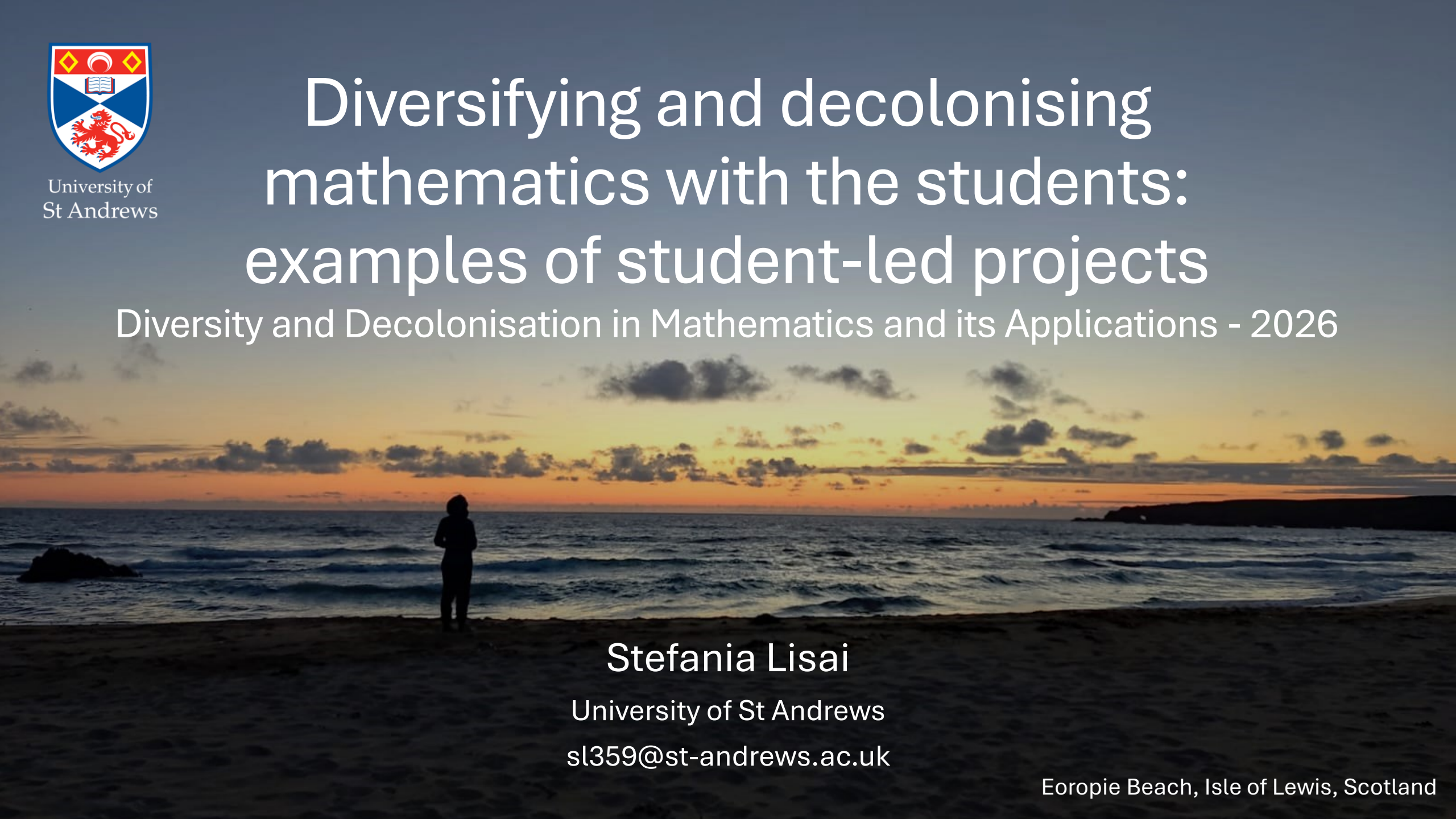




University of
St Andrews

Diversifying and decolonising mathematics with the students: examples of student-led projects

Diversity and Decolonisation in Mathematics and its Applications - 2026

A silhouette of a person standing on a beach, looking out at the ocean during a sunset. The sky is filled with orange and yellow light, and the water is dark with white-capped waves. The person is positioned in the lower center of the frame.

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Eorpie Beach, Isle of Lewis, Scotland



Camp housing displaced Palestinians, after Israeli air attack on 10 September 2024
Al-Mawasi, Palestine [Abdel Kareem Hana/AP Photo]

My journey in Decolonisation and Inclusive Education

- Tutor in AIMS Ghana 2019
- Finished my PhD, postdoc in Educational Research
- Tutor in AIMS Rwanda 2022
- Associate Lecturer at St Andrews

Research in Decolonisation and
Inclusive Education: where do I start?

**Students want to work on these
topics!**

Some examples and some photos of
Scotland



A mission to Decolonise the Mathematics Curriculum

Nadiyah Khan, Malachi Johns, Pahulpreet Kaur, Maria Dmitrieva, Jade Adedokun

Co-sponsored with Dr Shayo Olukoya (Keele University).

Resources for a willing but sceptical mathematician.

Summer Teams Enterprise Programme (STEP):

- A team of 5 undergraduate students from any discipline
- 7 weeks, working with a PhD coach (Jonah Klowss)
- Fully online

⇒ The students produced a [website](#): historical background on *why*, guidance on *how*, examples and resources.

Sense of belonging of LGBTQIA+ STEM Students

BSc Final-year project

- Lit review focussed on maths students, later extended to STEM
 - Survey for StA maths students
 - extended to STEM
 - delays with the ethics clearance
- ⇒ Gap in the literature on sense of belonging of LGBTQIA+ maths students
- ⇒ Is it appropriate to aggregate all STEM students?



Isle of Harris, Scotland



Humanising Mathematics – Investigating the Impacts of Colonialism on Mathematics Students from the Global South

Laidlaw Scholar Programme & StARIS by Risandi Imadoowage*

Semi-structured interviews with StA maths students from the GS¹, investigating qualitative perceptions of impacts of colonialism on StA students from the Global South:

- notion of ‘universality’ in maths, what students deem ‘maths’ and a ‘mathematician’ to be
- perceptions and experiences of indigenous/subaltern epistemologies within maths education
- potential action towards the ‘decolonisation’ of maths

Lack of interest from students, hard to find participants: why?

⇒ Analysis in progress –stay tuned!

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Exploring Accessibility in Mathematics: A Study of Neurodiversity in UK HE

BSc final-year project by Jacob Carey*


- Literature + student survey + staff survey
 - ⇒ Assessments: timed examinations, presentations and group work (staff), memory tests, unclear marking standard and unclear expectations (students).
 - ⇒ Cognitive load, structure, and predictability: early release of accessible materials, lecture recording (staff and students), small group tutorials, clear written instructions (students).
 - ⇒ Support: adjustments require disclosure.

Inclusion not through isolated adjustments. Need for redesign of curriculum, assessment and teaching practice, with consistent material, diversified assessments, clearer communication, staff training.

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Ben Cruachan, Scotland

A white bus with 'PENMAN COACHES' written on its side is parked in a green field. The bus is surrounded by a simple wooden fence. In the background, there are rolling green hills and mountains under a cloudy sky. The bus appears to be a converted vehicle, possibly used as a shelter or 'bothy'.

A long way to go!
Many thanks to the students for
their enthusiasm!