THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics⌁

GEOMETRY SEMINAR

Formalising frieze patterns in Lean 4

Dr. Antoine de Saint Germain

Department of Mathematics

The University of Hong Kong

Date:	Friday, August 30, 2024
Time:	11:00am – 12:00noon
Venue:	Rm 210, Run Run Shaw Bldg., HKU

Abstract

Lean 4 is an Interactive Theorem Prover which has received quite a bit of attention in recent years, notably due to the success of several projects aiming to formalise cutting-edge and non-trivial mathematics. In this talk, we present a recently-completed project, conducted with undergraduate students, to formalise several results related to Coxeter's frieze patterns. No prior knowledge of either frieze patterns or the Lean 4 programming language is required, and undergraduate students are highly encouraged to join.

All are welcome