



Mathematics Department University of Fribourg

Monday, 6.9.2021

Time: 15:15
Physics building
Lecture room 2.52

Special Colloquium

Prof. Ilka Agricola

Universität Marburg

How to classify homogeneous spaces. . . and why we should care about them

Abstract: *Homogeneous spaces are manifolds with many symmetries, and as such they are a fantastic playground for mathematical models ranging from general relativity to solid state physics. In this talk, I will give a non-technical approach to the different types of symmetries that one likes to consider - like reflections, special properties of geodesics, curvature, or differential operators - with many examples and applications. In the last part, I will present some recent classification results on certain classes of homogeneous spaces, and why they are interesting.*

The talk is suitable as an introduction to the vast area of homogeneous spaces for non-experts.