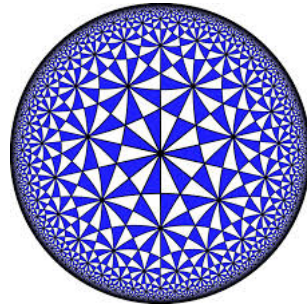


**Oberseminar Geometrie**  
Department of Mathematics  
University of Fribourg  
Seminar room, Math II (Lonza)  
**Wednesday October 23, 2019, 10:20**



MATTHIEU JACQUEMET (UNIFR / HES-SO VALAIS)

### **Fundamental hyperbolic polygons of minimal area**

It is a classical result due to Siegel that the hyperbolic Coxeter triangle  $(2,3,7)$  has minimal area among all polygons which are fundamental domains for the action of a discrete group of isometries on the hyperbolic plane. In this talk, I will prove a generalization of this result to fundamental hyperbolic  $n$ -gons with  $n$  fixed and of minimal area, and discuss some related questions involving inradius minimality and commensurability.