

Mathematics Department University of Fribourg

Tuesday, 23/5/2016

Time: 12:15 pm Physics building Lecture room 2.52

Mathematikon

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A Gentle Introduction to Curvature

Abstract:

The notion of curvature, although quite an intuitive concept, is notoriously difficult to understand in its most general mathematical formulation. We will try to introduce it as gently as possible by beginning with curves. Subsequently, this knowledge will be used to make sense of curvature of surfaces. In this context, we will discuss Gauss's Theorema Egregium and how it helps you to eat your pizza properly (such as various other interesting applications). If time permits, we will try to explain how these low-dimensional notions of curvature can be translated into arbitrary dimensions.

Except for the very last part, we will only use elementary mathematical concepts, which should make the talk accessible to everyone.



