The Geometry of Surfaces

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Tuesday 7:00 PM November 1st, 2022

The differential geometry of surfaces, pioneered by mathematicians such as Euler, Gauss, Riemann and Poincaré, is a standard topic in the undergraduate curriculum. In this talk, we will revisit the geometry of surfaces from a modern point of view, including recent research by myself (with P. Creutz and D. Ntalampekos) and as part of Stony Brook's REU program this past summer. The basic idea is that a systematic study of surfaces can be undertaken with minimal geometric assumptions.