

Student Geometry Seminar

國立清華大學數學系 學生幾何研討會

講題 Introduction to densities and integration on manifolds

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時間 2025.04.29 (Tue) 16:30 – 18:00

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Abstract

In this talk, I will define densities on real vector spaces and smooth vector bundles, which generalize volume forms and enable coordinate-free integration, even in the absence of orientation. This provides a flexible framework for integration on manifolds, where traditional tools like orientation may not apply. The main focus will be on the properties of densities and their role in integration, with a discussion on the natural pairing between densities and generalized sections, and how they relate to differential operators and adjointness.

Find more information at <https://sites.google.com/view/sgsnthu/home>

