Barcelona Analysis Seminar **2025–2026**

Date: March 3, 2026
Time: 16:00 CET
Room: CRM Auditorium (UAB)

Structure of one-dimensional metric currents

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The goal of the talk is to give an overview of the metric theory of currents by Ambrosio-Kirchheim, together with some recent progress. Metric currents are a generalization to the metric setting of classical currents. Classical currents are the natural generalization of oriented submanifolds, as distributions play the same role for functions. We present a structure result for metric 1-currents as superposition of 1-rectifiable sets in complete and separable metric spaces, which generalizes a previous result by Schioppa. This is based on an approximation result of metric 1-currents with normal 1-currents and a more refined analysis in the Banach space setting. This is joint work with D. Bate, J. Takáč, P. Valentine, and P. Wald (Warwick).

More information at: `https://mat.uab.cat/web/seminarianalisi/`