





## Barcelona Analysis Seminar

2023 - 2024

**Date:** March 7, 2024 **Time:** 16:00 CET

Room: UB T2 (Universitat de Barcelona)

## Quantitative geometric inequalities in $\mathbb{R}^n$ : power growth other than 2

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In the stability of geometric inequalities, usually one gets a growth with power 2 as a lower bound for the difference of energy. For example, a remarkable result by Fusco, Maggi, and Pratelli says that, for any set of finite perimeter  $E \subset \mathbb{R}^n$  with |E| = |B| and a barycenter at the origin, one has  $P(E) - P(B) \ge c(n)|E\Delta B|^2$ . This phenomenon also appears in some other follow-up work. During my talk, I introduce some recent results on the cases where the power is no longer 2 in Euclidean spaces.