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Barcelona Analysis Seminar **2025–2026**

Date: March 12, 2026
Time: 15:00 CET
Room: CRM Auditorium (UAB)

Stability of the solvability of the Dirichlet problem under small bi-Lipschitz domain transformations

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We show that small bi-Lipschitz deformations of a Lipschitz domain (with possibly large Lipschitz constant) preserve the solvability of the Dirichlet problem for the Laplacian with boundary data in L^p, for the same value of $p > 1$. As a consequence, for all $p > 1$, we obtain the solvability of the L^p Dirichlet problem for C^1 perturbations of convex domains, thereby unifying two fundamentally different settings in which such results were previously known: convex and C^1domains. This is a joint work with Linhan Li and Jinping Zhuge.

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