
Barcelona Analysis Seminar **2022–2023**

URL. <https://mat.uab.cat/web/seminarianalisi/>

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Room. B5 (Universitat de Barcelona)

Online streaming (Zoom). [Click here to join.](#)

The Signorini problem: overview and recent results

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The Signorini problem is a free boundary problem arising from elastostatics, and can also be seen as the counterpart to the obstacle problem when the obstacle has codimension 1. The main questions are understanding the regularity of solutions and the regularity of the free boundary. In the first part of the talk, I will present the problem and discuss some relevant known results. Then, I will introduce the concept of generic regularity and explain the strategy of Figalli, Ros-Oton and Serra to prove that kind of results in the obstacle problem. Finally, I will expose my recent result with Fernández-Real about generic regularity in the Signorini problem, and comment briefly on the recent developments that have made it possible.