



# Seminario Rubio de Francia

## Conferencia

por

**Antonin Procházka**  
Université de Franche-Comté

Título:

*On the equivalence of the Radon-Nikodym and Schur properties in Lipschitz-free spaces.*

*Abstract:* A Lipschitz-free space  $\mathcal{F}(M)$  is a Banach space constructed around a given metric space  $M$  in such a way that Lipschitz maps on  $M$  canonically extend to bounded linear operators on  $\mathcal{F}(M)$ . Arguably, the free spaces are presently one of the most studied classes of Banach spaces.

It turns out that many metric-geometric properties of  $M$  are reflected in Banach space-theoretic properties of  $\mathcal{F}(M)$  and vice versa. Typically, these Banach space properties are isometric in nature. This talk is based on a recent joint work with R. Aliaga, C. Gartland and C. Petitjean where we characterize some isomorphic Banach space properties of  $\mathcal{F}(M)$  for the first time. Namely we show that  $M$  is purely 1-unrectifiable if and only if  $\mathcal{F}(M)$  has any (and therefore all) of the following properties: the Radon-Nikodym property, the Krein-Milman property, the Schur property, does not contain a copy of  $L_1, \dots$

Fecha: Jueves, 3 de junio de 2021.

Hora: 12:00 horas.

Webinar: <https://us02web.zoom.us/j/88557299776?pwd=MTFuNVVJTTFk1bmVwcFFsNXVKd1Vadz09>

Web: <http://anamat.unizar.es/seminario.html>

<http://eventos.unizar.es/52859/detail/seminario-rubio-de-francia.html>