## SEMINARIO DE ANÁLISIS Y APLICACIONES

#### Viernes, 27 de noviembre de 2020

11:30 h., ONLINE - URL: https://conecta.csic.es/b/jos-ajp-qp4

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# Biparameter BMO under the action of a rotation

#### Resumen:

Composition by a bi-Lipschitz measure-preserving map on the one-parameter BMO space has been applied to study the Euler equation with a BMO-type vorticity. We would like to discuss the same problem in the setting of biparameter BMO space in  $\mathbb{R}^2$ . We will focus on composing by a rotation on the biparameter BMO space. This BMO space is not preserved by a rotation since it relies on the structure of axis-parallel rectangles. We will quantify this fact by interpolation inequalities. One straightforward application of the interpolation inequalities is a boundedness property of directional Hilbert transforms.

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