## HARDY SPACES AND SOBOLEV-BMO ESTIMATES FOR FRACTIONAL AND SINGULAR INTEGRALS

## Lucas Oliveira

Universidade Federal do Rio Grande do Sul - UFRGS, Brasil lucas.oliveira@ufrgs.br

We explore the mapping and boundedness properties of linear and bilinear fractional integral operators acting on Lebesgue spaces with large indices and also on Hardy spaces (weighted and unweighted). In particular, we show how this operators can be continuously extended to a bounded operator from Lebesgue spaces to Sobolev-BMO spaces, and also how they can be continuously extended from Hardy spaces into Hardy and Lebesgue spaces.

Joint work with Lucas Chaffee and Jarod Hart.