

5th International ISAAC Congress, July 25–30, 2005, Department of Mathematics and Informatics, University of Catania, Catania, Sicily, Italy

Coauthors: Stefan Samko

**DESCRIPTION OF THE RIESZ AND BESSEL POTENTIALS ON
LP(.) SPACES IN TERMS OF FRACTIONAL DERIVATIVES**

ALEXANDRE ALMEIDA

We characterize the spaces of Riesz and Bessel potentials on variable Lebesgue spaces via convergence of hypersingular integrals. This partially extends the known results for constant exponents to the variable exponent setting.

UNIVERSITY OF AVEIRO

E-mail address: alexandre@mat.ua.pt