



# Colloquium del Departamento de Análisis Matemático

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### “Ulyanov-type inequalities between Lorentz-Zygmund spaces”

**Jueves 28 de mayo de 2015**  
a las 13:00 horas en el seminario 222

#### Abstract:

We present sharp Ulyanov-type inequalities for moduli of smoothness relating the source Lorentz-Zygmund space  $L_{p,r}(\log L)_{\lambda}$ ,  $\lambda > 0$ , and the target space  $L_{p,s}(\log L)$  over  $\mathbb{R}^n$  if  $1 < p < p_* < 1$  and over  $T^n$  if  $1 < p \leq p_* < 1$ . As application of Ulyanov-type inequalities we give some embedding results for Besov spaces.

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