

# The $B_{\omega}^u$ Type Triebel-Lizorkin Spaces with Variable Smoothness and integrability

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## Abstract

Very recently, Nakai and Sobukawa in arXiv: 1410.6327 introduced the  $B_{\omega}^u$ -function space which unifies many function spaces, Lebesgue, Morrey-Campanato, Lipschitz,  $B^p$ , CMO, local Morrey-type spaces, etc. Motivated by their work, in this talk we introduce the  $B_{\omega}^u$  type Triebel-Lizorkin spaces with variable smoothness and integrability and give a molecular decomposition of these spaces.