Diego Maldonado and Virginia Naibo* (vnaibo@math.ksu.edu), Kansas State University, Mathematics Department, 138 Cardwell Hall, Manhattan, KS 66506. Besov-Lebesgue mapping properties for bilinear operators. Preliminary report.

We discuss Besov-Lebesgue mapping properties of the form $\dot{B}_{p}^{\alpha,s} \times L^{q} \to \dot{B}_{r}^{\alpha,s}$ for families of bilinear operators, including molecular paraproducts and Hörmander-Mihlin multipliers, and their connections with bilinear Littlewood-Paley theory. (Received September 05, 2008)