1030-42-81   **Diego Maldonado*** (`dmaldona@math.ksu.edu`), Department of Mathematics, Kansas State University, 138 Cardwell Hall, Manhattan, KS 66506, and **Arpad Benyi**, **Andrea Nahmod** and **Rodolfo Torres**. *Paraproducts as bilinear Calderon-Zygmund operators.*

We identify conditions on families of smooth molecules so that the paraproducts they build can be realized as bilinear Calderon-Zygmund operators. This allows to place the study of boundedness properties of paraproducts in the already established context of bilinear Calderon-Zygmund operators as developed by L. Grafakos and R. Torres. Also, we combine the molecular representation of paraproducts and the molecular decomposition of Triebel-Lizorkin spaces to obtain several new mapping properties of paraproducts. (Received July 19, 2007)

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