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**Marie A. Snipes\*** ([masnipes@umich.edu](mailto:masnipes@umich.edu)), 2074 East Hall, 530 Church Street, Ann Arbor, MI 48109-1043. *Geometric Integration Theory in Banach Spaces*.

Whitney's geometric integration theory in  $\mathbb{R}^n$  allows one to integrate over geometric objects called flat chains. The natural "functions" one integrates over these chains are flat forms, which are  $L^\infty$  differential forms with weak derivatives in  $L^\infty$ . In this talk we will discuss the generalization of this theory to arbitrary Banach spaces. (Received August 15, 2008)