Michael Bateman* (mdbatema@indiana.edu), Department of Mathematics, Rawles Hall, 831 East 3rd St, Bloomington, IN 47405. Maximal averages along one-variable vector fields.
We prove L^p estimates for a maximal operator along rectangles pointed in the direction of a vector field in R² depending on one variable. These estimates are related to the work of Lacey and Li on the Hilbert transform along vector fields. (Received February 12, 2008)