Meeting: 1000, Albuquerque, New Mexico, SS 12A, Special Session on Regularity in PDEs and Harmonic Analysis

Galia D. Dafni\* (gdafni@mathstat.concordia.ca), Department of Mathematics and Statistics, Concordia University, 1455 de Maisonneuve Blvd. West, Montreal, Quebec H3G 1M8, Canada.

Local Hardy spaces and nonhomogeneous div-curl lemmas.

Properties of the local Hardy space  $h^1$  of Goldberg are studied, in particular duality with a local version of VMO. Nonhomogeneous versions of the div-curl lemma, in which  $h^1$  is the target space, are proved in the whole Euclidean space and in domains. (Received August 10, 2004)