

1030-42-375

Dmitry Ryabogin*, 122 Chesterton Ln, Aurora, OH 44202. *Algebras of rough singular integrals*. Preliminary report.

We discuss the following question (asked by R. Coifman and G. Weiss): Do rough singular integrals with characteristics from the Hardy space (on the unit sphere) with the identity operator generate an algebra? In the two-dimensional case the answer is known to be affirmative, but starting from dimension three the problem is open. (Received August 07, 2007)