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Loredana Lanzani* (lanzani@uark.edu), SCEN 301 Mathematical Sciences Department, 1 University of Arkansas, Fayetteville, AR 72701, and **Elias M. Stein**. *Cauchy-Fantappié singular integrals for strongly pseudoconvex domains of class C^2* .

The only known proof of L^2 -boundary regularity of the Henkin-Ramirez (Cauchy-Fantappié) integral for a strongly pseudoconvex domain, is due to Kerzman and Stein: that proof requires the domain to be of class C^3 and does not extend to lower boundary regularity. In this talk I will present a new proof that works for the C^2 case and discuss some applications. This result is joint with E. M. Stein. (Received January 29, 2009)