

**Meeting:** 998, Houston, Texas, SS 3A, Special Session on Harmonic and Functional Analysis

998-43-282            **Magali Folch-Gabayet\*** (folchgab@matem.unam.mx) and **James Wright**. *Hilbert transform along curves with rational components.*

Let  $\Gamma$  be a curve in  $R^n$  with rational components,  $R_i = P_i/Q_i, 0 \leq i \leq n$ . and  $Hf(x) = p.v. \int f(x_1 - R_1(t), \dots, x_n - R_n(t)) \frac{dt}{t}$  the Hilbert transform along  $\Gamma$ . We prove that  $H$  is bounded on  $L^p(R^n)$ , with bounds depending only on the degrees of the polynomials  $P_i$  and  $Q_i$ . (Received March 01, 2004)