

# COMMUTATORS OF RIESZ TRANSFORMS RELATED TO SCHRÖDINGER OPERATORS

B. BONGIOANNI, E. HARBOURE AND O. SALINAS

ABSTRACT. In this work we obtain boundedness on  $L^p$ , for  $1 < p < \infty$ , of commutators  $T_b f = bTf - T(bf)$  where  $T$  is any of the Riesz transforms or their conjugates associated to the Schrödinger operator  $-\Delta + V$  with  $V$  satisfying an appropriate reverse Hölder inequality. The class where  $b$  belongs is larger than the usual  $BMO$ . We also obtain a substitute result for  $p = \infty$ , under a slightly stronger condition on  $b$ .