1037-91-196   **Svetlana Boyarchenko** and **Sergei Levendorskiĭ*** (`leven@eco.utexas.edu`), Department of Economics, 1 University Station, The University of Texas at Austin, C3100, Austin, TX 78712. *The Wiener-Hopf factorization as a general method for pricing American options in Lévy models with stochastic interest rate and/or volatility.*

A general efficient iteration procedure for pricing American options in regime switching Lévy models is developed. Lévy models with stochastic volatility and/or stochastic interest rate are reduced to regime switching models using the discretization of the state space for additional factors. The efficiency of the method for 2 factor Lévy models with jumps and for 3-factor Heston model with stochastic interest rate is demonstrated. The method is much faster than Monte-Carlo methods and can be a viable alternative to Monte Carlo method as a general method for 2-3 factor models. (Received February 01, 2008)