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**Zhiren Jin\*** (obonly@gmail.com), Department of Mathematics and Statistics, Wichita State University, 1845 N. Fairmount, Wichita, KS 67219. *A Lower Bound for Principal Eigenvalues in Parabola-Shaped Regions.*

When a domain is inside a parabola-shaped region, we show that the principal eigenvalues for Dirichlet problems of a linear second order elliptic operator in non-divergent form are bounded from below by a positive constant that is independent of the domain. (Received September 11, 2008)