1012-35-36   **Kaihua Cai*** (`kaihua.cai@gmail.com`), 1321 Henry St., Berkeley, CA 94709. *Dispersion of Schrodinger operators with Lame potentials.*

We consider the dispersive estimate for the Schrodinger operator on the real line with Lame potentials i.e. $V(x) = n(n + 1)\wp(x + w_3)$. In this case, the spectrum of the operator is a union of n+1 many bands. Taking $n = 1$, the eigenfunction can be expressed explicitly be Weirstrauss functions. Therefore we can express the Schrodinger evolution by Green's function. By a stationary phase argument, we obtain the L_∞ norm of the solution of the Schrodinger equation at time t decays at a rate $t^{-1/3}$. (Received August 15, 2005)