We present a joint work with S. Cuccagna related with the scattering of solutions to

$$
\begin{gathered}
i u_{t}=u_{x x}+V(x) u+u|u|^{p} \\
u(0)=u_{0} \in H^{1}(\mathbb{R})
\end{gathered}
$$

where $p>6, V(x)$ is a periodic potential and $u_{0}$ is small.

