1012-35-92   **Michael Hitrik*** (`hitrik@math.ucla.edu`), Department of Mathematics, UCLA, Los Angeles, CA 90095-1555, and **Johannes Sjöstrand** and **San Vũ Ngọc**. *KAM tori and spectral asymptotics for non-selfadjoint operators.*

We study spectral asymptotics for small non-selfadjoint perturbations of selfadjoint semiclassical operators in dimension 2, assuming that the classical flow of the unperturbed part possesses invariant Lagrangian tori enjoying a Diophantine property. Under a global hypothesis of dynamical nature, involving long time averages of the leading perturbation along the classical flow, we obtain a complete asymptotic description for all eigenvalues in certain rectangles inside the spectral band in the complex plane. (Received September 12, 2005)