Ivana Alexandrova* (alexandrovai@ecu.edu), Department of Mathematics, 124 Austin Building, East Carolina University, Greenville, NC 27858. The Spectral Function at a Maximum of the Potential. Preliminary report.

We consider the spectral function at a non-degenerate maximum of the potential and prove that it is a semi-classical Fourier integral operator. We also compute the phase function in the oscillatory integral representation of the spectral function. (Received September 11, 2006)