1020-47-179   **Anna Skripka*** (`skripkaa@math.missouri.edu`), Department of Mathematics, University of Midssouri-Columbia, Mathematical Sciences Bldg, Columbia, MO. *On perturbation of operators in semifinite von Neumann algebras.* Preliminary report.

We discuss an analog of the classical Birman-Schwinger principle in the context of spectral perturbation theory in a semifinite von Neumann algebra $\mathcal{A}$. For self-adjoint operators affiliated with $\mathcal{A}$, the statement of the Birman-Schwinger principle is very much alike to the traditional one in the case when $\mathcal{A}$ is of type I_∞. For dissipative operators in $\mathcal{A}$, we prove results similar to those obtained recently by V. Kostrykin, K. A. Makarov, and the author in the case of a finite algebra $\mathcal{A}$. (Received August 29, 2006)

1