1099-47-212 Ken Dykema* (kjd@tamu.edu) and Anna Skripka. Perturbation formulas for traces on normed ideals.

Trace perturbation formulas are expressions for $\tau(f(H_0 + V) - f(H_0))$ where τ is a trace, H_0 and V are operators (H_0) is often allowed to be unbounded) and f is a function belonging to a suitable class. The classical case, where τ is the classical trace on $B(\mathcal{H})$ and V is a trace-class operator, was considered by Krein. We prove more general results, for τ a trace on an ideal \mathcal{I} of operators, with $V \in \mathcal{I}$. We will also discuss higher order perturbation formulas. (Received February 09, 2014)