1172-35-324   **Vadim Zharnitsky***, 2615 WILLOUGHBY RD, CHAMPAIGN, IL 61822-7567, and **Eugene Wayne**. *Exponential bound of the integral of a weighted product of Hermite functions.* Preliminary report.

An integral of a product of two Gauss-Hermite functions with exponential weight is considered. An exponential estimate is obtained in the difference of indices. Such integrals arise in mathematical physics, in particular in the analysis of a perturbed Schroedinger equation with quadratic potential and in the local analysis of ground states in the continuous resonance equations. (Received August 31, 2021)