
The evaluation of matrix functions $f(A)v$, where $A$ is a large symmetric matrix, $f$ is a function, and $v$ is a vector, may be prohibitively expensive. It is well known that the Lanczos algorithm can be used to determine inexpensive approximations of $f(A)v$. This talk is concerned with estimating the error in the computed approximations (Received September 18, 2018)