

1014-35-541 **Peter McCoy*** (pam@usna.edu), Mathematics Department, U.S. Naval Academy, Annapolis, MD 21402, and **Reza Malek-Madani**, Mathematics Department, U.S. Naval Academy, Annapolis, MD 21401. *On Normal Mode Expansion of Solutions to the Paraxial Wave Equation.*

Transform based methods develop integral representations of solutions from normal mode expansions in a half-space. These methods lead to new formulations of solutions to include those that exhibit "pole like" behavior. (Received September 20, 2005)