1142-32-192   **Raymond T. Walter*** (`rwalter@email.uark.edu`), PO Box 160, Clarkridge, AR 72623. *The Wave Equation for the Kohn Laplacian on Quadrics.* Preliminary report.

In this talk, I consider the formalism of Peloso & Ricci for the analysis of the Kohn Laplacian on quadric CR manifolds, but privilege the Segal-Bargmann or Fock representation of Ogden & Vági rather than the Schrödinger representation that they chose. This model has not been presented in the literature for mixed signatures of the Levi form, to my knowledge. My main application, generalized to these quadrics, is a Laguerre series expansion of the fundamental solution for the wave equation for the Kohn Laplacian, which was obtained by Nachman for the isotropic Heisenberg group. The non-isotropic Heisenberg group turns out to be an easy generalization, and we sketch the case of codimension two CR submanifolds of $\mathbb{C}^4$. My treatment proceeds without reference to the Laguerre calculus of P. Greiner, D.-C. Chang, and other authors. Analogies to mathematical physics are discussed where possible. (Received September 03, 2018)