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Albert Boggess* (boggess@asu.edu), School of Math and Statistical Sciences, Arizona State University, Tempe, AZ 85287-1804, and **Andrew Raich**. *Estimates on the Fundamental Solution to the Complex Green Operator in Higher Codimension*. Preliminary report.

The goal of this work (joint with Andy Raich, University of Arkansas) is to discuss recent progress on the estimates of the fundamental solution to the Kohn Laplacian (Box_b) in higher codimension. Unlike the hypersurface case, little is known about these estimates. In this talk, an explicit formula will be presented for the fundamental solution to Box_b for each of three “model” quadrics which have codimension two in C^4 and their estimates will be discussed. The kernel in one of these models is quite a bit more singular than the others and the estimates in this case have no known relationship to familiar metrics in geometry such as the Szego metric or sum of squares metric. Generalizations and conjectures for codimension greater than 2 in C^n will also be mentioned. (Received August 27, 2018)