1022-32-108 **Michael D. Bolt*** (mbolt@calvin.edu), Department of Mathematics and Statistics, 1740 Knollcrest Circle SE, Calvin College, Grand Rapids, MI 49546-4403. *Complex ellipsoids and the Bochner-Martinelli kernel.*

This talk concerns symmetry properties of certain Cauchy-Fantappiè kernels that arise in the study of holomorphic functions in complex Euclidean space. First, Boas' characterization of bounded domains for which the Bochner-Martinelli kernel is self-adjoint is extended to the case of weighted boundary measure. For strictly convex domains, this equivalently characterizes the ones whose Leray-Aĭzenberg kernel is self-adjoint with respect to weighted boundary measure. In each case, the domains are complex linear images of a ball, and the measure is the Fefferman measure. Finally, the Leray-Aĭzenberg kernel for a strictly convex hypersurface in $\mathbb{C}^n$ is shown to be Möbius invariant when defined with respect to Fefferman measure. (Received September 11, 2006)