1142-32-102 **David E Barrett*** (barrett@umich.edu), Dept of Math, 530 Church Street, Ann Arbor, MI 48104, and Luke D Edholm. Use of projective dual coordinates and model domains in analysis of the Leray transform. Preliminary report.

Projective dual coordinates on a real hypersurface (in complex euclidean or projective space) provide a CR analogue of the Legendre transform from real convexity theory.

With the use of these coordinates, the (Cauchy-)Leray transform (an explicit oblique projection operator mapping L^2 of the hypersurface onto the corresponding Hardy space) may be written in a form resembling the formula for the Szegő projection for the sphere or for the Heisenberg group.

The talk will exhibit how this way of writing things helps with transfer of results for for Leray transform on model hypersurfaces

$$\{(z_1, z_2): \operatorname{Im} z_2 \ge |z_1|^2 + \beta \operatorname{Re}(z_1^2)\}$$

 $(0 \le \beta < 1)$ to the setting of general strongly (\mathbb{C} -)convex hypersurfaces in complex dimension two. (Received August 30, 2018)