1030-32-326 **David E. Barrett*** (`barrett@umich.edu`), Dept. of Mathematics, 530 Church St, Ann Arbor, MI 48109-1043, and **Loredana Lanzani**, MI. *The Leray transform in two dimensions: spectral properties, transformation laws and duality.*

Recent results concerning the Leray transform

$$\mathbb{L}f(w) = \frac{-1}{4\pi^2} \int\limits_{\zeta \in bD} f(\zeta) \frac{\partial\rho(\zeta) \wedge \overline{\partial}\partial\rho(\zeta)}{(\partial\rho(\zeta)[\zeta - w])^2}$$

on convex Reinhardt domains will be presented, and possible generalizations to more general lineally convex domains will be considered. (Received August 06, 2007)