

ON GENERALIZED DIVERGENCE AND LAPLACE
OPERATORS AS A MATTER OF DIVISION OF
DISTRIBUTIONS

HUGO AIMAR AND IVANA GÓMEZ

ABSTRACT. Starting from the approach to the Laplacian with respect to coupling measures and undirected weighted graphs, we provide a setting for a general point of view for a Kirchhoff type divergence and a Laplace operators built on the trivial gradient of order zero $f(y) - f(x)$. We consider some particular classical and new instances of this approach.