AN OPTIMAL MATCHING PROBLEM FOR THE EUCLIDEAN DISTANCE

JULIO D. ROSSI

We deal with an optimal matching problem, that is, we want to transport two measures to a given place, where they will match, minimizing the total transport cost that in our case is given by the sum of the Euclidean distance that each measure is transported. We show that such a problem has a solution. Furthermore we perform a method to approximate the solution of the problem taking limit as $p \to \infty$ in a system of PDE's of p−Laplacian type.

Departamento de Análisis Matemático, U. de Alicante, Alicante, Spain and Departamento de Matemática, FCEyN, U. de Buenos Aires, Buenos Aires, Argentina

E-mail address: julio.rossi@ua.es