

# OPTIMAL TRANSPORTATION PROBLEMS IN SOME SAND-PILES MODEL

LUIGI DE PASCALE

We will show the connection between the optimal transportation problem (or Monge-Kantorovich problem) and a commonly used model in granular matter theory. We will use this connection to prove existence, uniqueness and a weak form of regularity for solutions in different situations.

DIPARTIMENTO DI MATEMATICA APPLICATA "U.DINI", VIA BUONARROTI 1/C, 56127 PISA,  
ITALY

*E-mail address:* `depascal@dm.unipi.it`