ON A DISCRETE GENERALIZED KINETIC APPROACH
FOR MODELLING PERSUADERS INFLUENCE
IN OPINION FORMATION PROCESSES

MARIA LETIZIA BERTOTTI$^1$ AND MARCELLO DELITALA$^2$

$^1$ Dipartimento di Metodi e Modelli Matematici, Università di Palermo, Italy; bertotti@unipa.it
$^2$ Dipartimento di Matematica, Politecnico di Torino, Italy; marcello.delitala@polito.it

Abstract. This paper deals with the definition of a general framework, inspired to discrete generalized kinetic theory, suitable for the description of the evolution of opinions within a population also in the presence of some external actions. As a conceivable application, a specific model of opinion formation is formulated, relying on the interactions of single individuals within the population. Then, two examples of possible persuader’s influence are constructed. The resulting models are expressed by means of nonlinear ordinary differential equations, which are then investigated both analytically and computationally.