ABSTRACT

The motion of crowds has been investigated significantly in social sciences in order to predict the pedestrians' motion under particular circumstances. Pedestrian models have been mainly exploited for urban planning, evacuation planning and robotics.

The model presented in this paper describes the people's motion during an entertainment situation, i.e. an apero in ETHz. The algorithm is essentially based on the social force model elaborated by Helbing, Molnar, Farkas and Vicsek, which treats people as particles abiding the Newtonian mechanics laws.

The focus of the research converts on the analysis of different dispositions of the objects in space so that the participants enjoy the event as much as possible. More precisely, we analysed specific dispositions of tables and of the buffet organization. We also studied the influence of the number of the people on the participants' experience.

The outcomes of the simulations show that the apero runs in a smoother way for some special organizations of the hall and for particular number of guests.