# A numerical scheme for evacuation dynamics

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We want to establish a stable numerical scheme for a nonlinear advection - diffusion equation, meant as a model of crowd dynamics. We propose a numerical scheme, show its stability and present some simulation related to the so-called Braess paradox, i.e. the fact that an obstacle placed in front of the exit accelerates the evacuation.

**Keywords:** conservation law, diffusion, FEM, CFL condition, stability.