

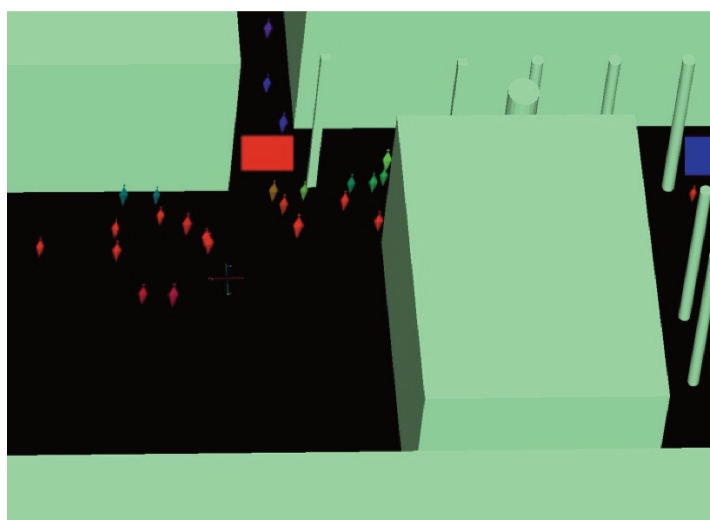
SIMULATION OF THE DYNAMICS OF PEDESTRIAN FLOWS IN NORMAL AND CRITICAL CONDITIONS

Innovations and benefits - SIMP is a software that can simulate pedestrian flows within infrastructures such as metro and railway stations. The simulator was developed through the use of autonomous agent simulation tools, computational units equipped with perception, reasoning and autonomy.

SIMP is able to bring out complex collective behaviors and to characterize pedestrian dynamics in a specific environment to test its safety.

Use - The recipients of the service are the Decision-makers involved in the control and supervision of pedestrian flows. The product has also the requisites to provide a contribution to the design of high transit flow environments and to the detection of possible anomalies in the environment itself in normal and critical conditions.

Applications and ongoing Activities - SIMP was validated based on data collected from actual evacuation tests held in a building inside the ENEA Casaccia research center. The simulator was applied to some metro stations in Turin and to a specific area of the Tiburtina railway station in Rome.



Characteristics:

STANDARD The service is provided in standard mode