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## A 2D chaotic path planning for mobile robots accomplishing boundary surveillance missions in adversarial conditions

By: **Curiac, DI** (Curiac, Daniel-Ioan)<sup>[1]</sup>; Volosencu, C (Volosencu, Constantin)<sup>[1]</sup>COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION 

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In normal circumstances a patrol robot will compute its path. However, in adversarial conditions, the task is getting more complicated. Here, the robot's path must avoid obstacles and its own previous positions. Opponents. Chaotic systems provide the needed framework for these missions. In this paper, we propose a method for boundary patrol missions no method has been proposed before. The method is based on the chaotic dynamic of the Henon system, which is a well-known chaotic system. Copyright © 2018 Elsevier B.V. All rights reserved.

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