## Limit-Cycles Method for the Navigation and Avoidance of Any Form of Obstacles for Mobile Robots in Cluttered Environment

Authors: F. Boufera, F. Debbat

**Abstract:** This paper deals with an approach based on limit-cycles method for the problem of obstacle avoidance of mobile robots in unknown environments for any form of obstacles. The purpose of this approach is the improvement of limit-cycles method in order to obtain safe and flexible navigation. The proposed algorithm has been successfully tested in different configuration on simulation.

Keywords: mobile robot, navigation, avoidance of obstacles, limit-cycles method

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