
Lélia BLIN – Exclusive distributed graph searching

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Abstract

I will present the graph searching problem, where a team of searchers aims at capturing an intruder in a network, modeled as a graph. All variants of this problem assume that any node can be simultaneously occupied by several searchers. This assumption may be unrealistic, e.g., in the case of robots. We thus investigate exclusive graph searching, in which no two or more searchers can occupy the same node at the same time, and, as for the classical variants of graph searching, we study the minimum number of searchers required to capture the intruder.

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Lélia Blin is an associate professor in the laboratory of UPMC (LIP6), she teaches at the University of Evry. She is working on distributed algorithms, more specifically on self-stabilization, with applications on sensors networks and autonomous mobile robots.

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