# PFE / MT



#### **Simulation**

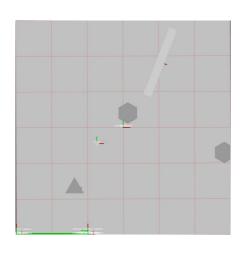


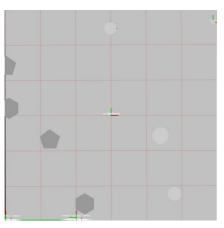
- Arrêter investigation si zone EMPTY
  - OK
- Environnements plus petits
  - OK
- Velocity avoidance
  - Pas bloquant

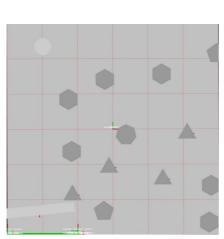
### **Simulation**

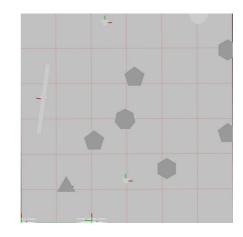


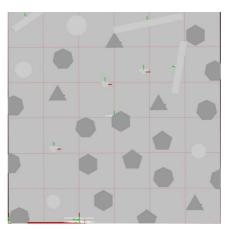
#### Environnements de test











- D = [1, 2, 4]
- Overlap = 0.1
- n\_points = [4, 5, 6, 7]

#### **TSP**



- Problème = GMDMTSP
  - Multi depot
  - Mutiple traveling salesman

But no depot return needed

## **TSP**



# Existing algorithms:

Table 1: Solution procedures proposed for the mTSP

Type of approach	Solution procedure
Exact solution	Formulations and to describe exact and heuristic solution [3] Graph Theory [9] Integer linear programming formulations [18,19] Cutting plane [20] Branch and Bound [21,22] Lagrange an relaxation + branch and bound [23]
Heuristics	Ant Colony [8,11] Sweep Algorithm [12] Particle Swarm Optimization [13] Columnar competitive model + neural networks [15] Simple heuristics [24,25] Evolutionary algorithm [26] Simulated annealing [27] Genetic algorithms [4,5,7,9,14,28,29] Neural networks [6,30,31,32] Tabu search [33]
Transformations	Asymmetric mTSP to asymmetric TSP [34] Symmetric mTSP to symmetric TSP [35,36] Multi-depot mTSP to TSP [37,38]