

Swarm Intelligence H-414

Swarm robotics

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Collective decision making

Process of selecting an option among a set of alternatives

Example:

Honeybees nest selection

<http://tiny.cc/1gfb4y>



Exercise: color selection

Goal:

Reach consensus on one color among {red, blue, green}

Proceeding:

function *init()*:

- ▶ select color randomly

function *step()*:

- ▶ take decision

function *reset()*:

- ▶ restore state of controller

Material:

<https://iridia.ulb.ac.be/courses/2019/h-414/>