

## Check Points: Competitive and Cooperative Co-evolution

If you are not able to answer some of these questions, first check the slides and lecture notes. If you still do not understand the question, send me an e-mail at [Dario.Floreano@epfl.ch](mailto:Dario.Floreano@epfl.ch)

- What is competitive co-evolution?
- What is the difference between formal and computational models of competitive co-evolution?
- What is the problem of cycling dynamics in competitive coevolution and how can it be prevented?
- Why instantaneous fitness is not a measure of progress in competitive co-evolution?
- How can we measure competitive co-evolutionary progress?
- What is the Hall of Fame selection method and why is it useful?
- Does competitive co-evolution lead to progress?
- Why is it difficult to explain the evolution of altruistic cooperation?
- What do the hypotheses of genetic relatedness and group selection consist in?
- Describe algorithms that vary genetic relatedness and level of selection
- How should one set an co-evolutionary algorithm to ensure the emergence of altruistic cooperation?