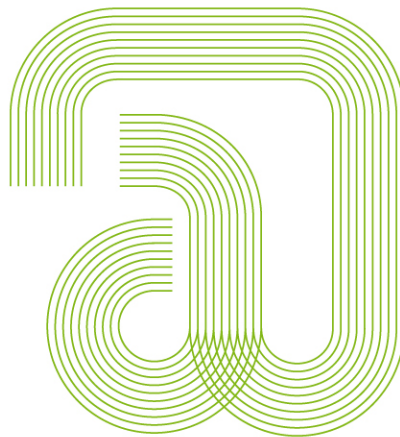


Universidade de Vigo

# Evolutionary Computation – Lab-Session 5



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Remind we have fixed the due dates for the second homework as announced already:

- **March 31th** for the particle swarm optimization for real-valued functions (Schaffer and Rosenbrock) and the TSP problem.

## 1. Fifth Week

**Objectives:** Start to work with particle swarm optimization, on the same problems as already used and with the Guofei-package.

1. Implement and run (using the Guofei-package) the minimization of the Schaffer-function and 4d-Rosenbrock function. You can use the examples given in the package as baseline. Experiment with the settings of the free parameters and argue about your findings.

You find more problem instances with their corresponding optimal tour on the public webpage accompanying the lecture.

2. Again calculate simple statistics (such as average, mean, and standard deviation) regarding the best values found by your Monte Carlo runs. Discuss your findings.

Use a python notebook to implement, execute, and document your work.