EVOLUTIONARY TASK FORCE

SUMMARY OF WEEK 21 & 22 (20 MARCH – 2 APRIL 2012)

We presented our work on the General Assembly in Karlsruhe (21-22 March). We also discussed the presentation for the review meeting in Stuttgart (3-4 May) and agreed that we will have only one presentation with one presenter (Gusz) reporting on all subtasks.

Unfortunately, even the joint efforts of Prague, Amsterdam, Graz, and Paris did not lead to sufficient (= enough and good) results for a PPSN 2012 submission. After fixing the hinge problem we continue the experiments and will look for a suitable conference if they are finished successfully. In principle, we could go directly for a journal paper, if there are no appropriate conferences in this period.

S/T details:

Subtask-force 1 (Morphogenesis)
Markus is still working on the integration of the Virtual Embryogenesis into the evo-cluster framework. He takes inspiration from the explicit representation and uses Berend's docking code. We expect Graz to start "real" runs soon.

YaoYao is also working on integrating his GRN approach. He paid a one-day visit to Amsterdam to collaborate with Berend. This helped to solve most of the technical problems. The code is mostly finished, just some small tuning remains.

Subtask-force 2 (Organism control)
By using different settings for the simulator the problem of "jittery" hinges has been solved and organisms are able to move their hinges fluently now.

The tests with the improved system are currently running with both CPG and AHHS approaches. As soon as the GRN approach has been integrated it will start testing as well. The first results are very promising. The CGP-based controllers seem to learn a smooth gait, this holds even for the T-shaped organism. We hope to have enough data next week for a well-funded report.

More details and a full collection of our weekly reports on https://symbrion-ec.wikidot.com/