

DEPARTEMENT DES RELATIONS EXTERIEURES
Communication Recherche

Aéropole de Charleroi
Av. Lemaître 19 – 6041 Charleroi
Nathalie Gobbe, T +32 (0)71 60 02 06, +32 (0)474 84 23 02,
M ngobbe@ulb.ac.be
Nancy Dath, T +32 (0)71 60 02 03, M ndath@ulb.ac.be

Press Release

Brussels, 12 January 2010

European Research Council : ULB awarded for "swarm intelligence"

Marco Dorigo, IRIDIA-Faculty of Applied Sciences ULB, wins an **ERC Advanced Grant** (European Research Council) for his project "Engineering Swarm Intelligence Systems - E-SWARM".

The project E-SWARM of Marco Dorigo concerns "swarm intelligence", a branch of artificial intelligence that deals with natural and artificial systems composed of many individuals who present collective behavior exploiting decentralized control and self-organization.

In this project, Dr Dorigo will focus on the design and implementation of artificial "swarm" intelligence systems for the solution of complex problems. Currently, the understanding of artificial "swarm" intelligence largely relies on individual intuitions of experienced researchers. This is not sufficient for the design of swarm intelligence systems at the level of complexity required by real-world applications.

The goal of the E-SWARM project is to develop a rigorous engineering methodology for the design and implementation of artificial "swarm" intelligence systems. Marco Dorigo believe that in the future "swarm" intelligence will become an important tool for researchers and engineers interested in solving certain classes of complex problems. To build the foundations of this discipline and to develop an appropriate methodology, researchers will solve various challenging problems in the fields of optimization, robotics, networks and data mining.

The E-SWARM project will start in 2010 under the supervision of Marco Dorigo, Research Director FNRS within the laboratory IRIDIA (CODE Department, Computer and Decision Engineering).

Scientific information :

Marco Dorigo, IRIDIA, ULB

+32 (0)2 650 31 69 ou mdorigo@ulb.ac.be

ERC Advanced Grant, in brief :

Prestigious prize awarded by the European Research Council to researchers recognized as leaders in their field, the ERC Advanced Grant is designed to encourage risk-taking and interdisciplinarity in research and supports high quality researchers recognized as pioneers.

Since 2008, the ULB has won no less than three ERC in the category "Starting Grant" Estelle CANTILLON of ECARES (Faculty of Social and Political Sciences, Solvay Brussels School of Economics and Management), Cédric Blanpain of IRIBHM (Faculty of Medicine) and Frédéric Bourgeois, Department of Mathematics (Faculty of Science).