

 Content archived on 2024-05-28



A theoretical framework for swarms of GRN-controlled agents which display adaptive tissue-like organisation

Results

Project Information



SWARM-ORGAN

Grant agreement ID: 601062

[Project website](#) 

Project closed

Start date

1 March 2013

End date

30 September 2016

Funded under

Specific Programme "Cooperation": Information and communication technologies

Total cost

€ 2 877 122,00

EU contribution

€ 2 221 000,00

Coordinated by

FUNDACIO CENTRE DE
REGULACIO GENOMICA



Spain

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#) .

Publications

[A Strategy for Self-Organized Coordinated Motion of a Swarm of Minimalist Robots](#)

Author(s): Shirazi, Ataollah Ramezan; Jin, Yaochu

Published in: Institute of Electrical and Electronics Engineers (IEEE)Crossref 2017

Permanent ID: Digital Object Identifier:10.1109/tetci.2017.2741505; Microsoft Academic Graph Identifier:2758977712

[Bio-inspired self-organising multi-robot pattern formation: A review](#)

Author(s): Oh, Hyondong; Ramezan Shirazi, Ataollah; Sun, Chaoli; Jin, Yaochu

Published in: Elsevier BVCrossref 2017

Permanent ID: Digital Object Identifier:10.1016/j.robot.2016.12.006; Microsoft Academic Graph Identifier:2567990716

[Parsimonious Model of Vascular Patterning Links Transverse Hormone Fluxes to Lateral Root Initiation: Auxin Leads the Way, while Cytokinin Levels Out](#)

Author(s): el-Showk, Sedeer; Help-Rinta-Rahko, Hanna; Blomster, Tiina; Siligato, Riccardo; Maree, Athanasius F. M.; Mähönen, Ari Pekka; Grieneisen, Veronica A.

Published in: Public Library of Science (PLOS)PLOS Computational Biology, Vol 11, Iss 10, p e1004450 (2015) 2015

Permanent ID: Digital Object Identifier:10.1371/journal.pcbi.1004450; PubMed ID:26505899; PubMed Central ID:PMC4623515; Microsoft Academic Graph Identifier:2099325579; Handle:10138/162067

[Root branching plasticity: collective decision-making results from local and global signalling](#)

Author(s): Winston Tyler McCleery; Nadiatul A. Mohd-Radzman; Verônica A. Grieneisen

Published in: Elsevier BV0955-0674 2017

Permanent ID: Digital Object Identifier:10.1016/j.ceb.2017.03.001; PubMed ID:28347931; Microsoft Academic Graph Identifier:2600044376

[Morphogen diffusion algorithms for tracking and herding using a swarm of kilobots](#)

Author(s): Oh, Hyondong; Shiraz, Ataollah R.; Jin, Yaochu

Published in: Springer Science and Business Media LLCrossref 2016

Permanent ID: Digital Object Identifier:10.1007/s00500-016-2182-2; Microsoft Academic Graph Identifier:2367762288

[Analysis of a spatial gene expression database for sea anemone Nematostella vectensis during early development](#)

Author(s): Johann de Jong; Mark Q. Martindale; Eric Röttinger; Eric Röttinger; Eric Röttinger; Jaap A. Kaandorp; Daniel Botman; Fredrik Jansson
Published in: Springer Science and Business Media LLC BMC Systems Biology 2015
Permanent ID: Digital Object Identifier:10.1186/s12918-015-0209-4; PubMed ID:26400098; PubMed Central ID:PMC4581490; Microsoft Academic Graph Identifier:2110016625

[A spectrum of modularity in multi-functional gene circuits](#)

Author(s): James Sharpe; James Cotterell; James Cotterell; Alba Jiménez; Andreea Munteanu; Andreea Munteanu
Published in: Springer Science and Business Media LLC Molecular Systems Biology, Vol 13, Iss 4, Pp 1-17 (2017) 2017
Permanent ID: Digital Object Identifier:10.15252/msb.20167347; PubMed ID:28455348; PubMed Central ID:PMC5408781; Microsoft Academic Graph Identifier:2609996848; Handle:10230/58842

[Understanding the Sub-Cellular Dynamics of Silicon Transportation and Synthesis in Diatoms Using Population-Level Data and Computational Optimization](#)

Author(s): N. Javaheri; R Dries; J. Kaandorp
Published in: Public Library of Science (PLOS) PLoS Computational Biology, Vol 10, Iss 6, p e1003687 (2014) 2014
Permanent ID: Digital Object Identifier:10.1371/journal.pcbi.1003687; PubMed ID:24945622; PubMed Central ID:PMC4063665; Handle:11245/1.439951; Microsoft Academic Graph Identifier:2055834320

[Key Features of Turing Systems are Determined Purely by Network Topology](#)

Author(s): James Sharpe; Luciano Marcon; Luciano Marcon; Patrick Müller; Xavier Diego
Published in: American Physical Society (APS) instname: 2018
Permanent ID: Digital Object Identifier:10.1103/physrevx.8.021071; Digital Object Identifier:10.48550/arxiv.1708.09645; arXiv:http://arxiv.org/abs/1708.09645; Handle:10261/242380; Microsoft Academic Graph Identifier:2752884267; Microsoft Academic Graph Identifier:3099186710; Handle:10230/43059; Handle:10900/92164

[The mechanisms of gene regulatory networks constrain evolution: A lesson from synthetic circuits](#)

Author(s): Ljiljana Mihajlovic; Andreas Wagner; James Sharpe; James Sharpe; James Sharpe; Julien Renggli; Jose Duarte; Alba Jiménez; Mark Isalan; Yolanda Schaerli
Published in: Cold Spring Harbor Laboratory Crossref 2017
Permanent ID: Digital Object Identifier:10.1101/184325; Microsoft Academic Graph Identifier:2750915275; Microsoft Academic Graph Identifier:3104519968

Showing 1-10 out of 11

[See all 11 results](#)

Last update: 15 July 2019

Permalink: <https://cordis.europa.eu/project/id/601062/results>

European Union, 2025