

# Interdisciplinary DYNALIFE Workshop

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26 – 28 October 2023

Parkhotel Luna Mondaschein

Bozen-Bolzano



COST Action  
CA21169



Funded by  
the European Union



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA  
DIPARTIMENTO DI SCIENZE STATISTICHE  
"PAOLO FORTUNATI"



Freie Universität Bozen  
Libera Università di Bolzano  
Università Liedia de Bulsan

## ABOUT DYNALIFE

In the mid-twentieth century two new scientific disciplines emerged forcefully: molecular biology and information-communication theory. At the beginning cross-fertilisation was so deep that the term genetic code was universally accepted for describing the meaning of triplets of mRNA (codons) as amino acids. However, today, such synergy has not taken advantage of the vertiginous advances in the two disciplines and presents more challenges than answers. These challenges are not only of great theoretical relevance but also represent unavoidable milestones for next generation biology: from personalized genetic therapy and diagnosis, to artificial life, to the production of biologically active proteins. Moreover, the matter is intimately connected to a paradigm shift needed in theoretical biology, pioneered long time ago in Europe, and that requires combined contributions from disciplines well outside the biological realm. The use of information as a conceptual metaphor needs to be turned into quantitative and predictive models that can be tested empirically and integrated in a unified view. The successful achievement of these tasks requires a wide multidisciplinary approach, and Europe is uniquely placed to construct a world leading network to address such an endeavour. The aim of this Action is to connect involved research groups throughout Europe into a strong network that promotes innovative and high-impact multi and inter-disciplinary research and, at the same time, to develop a strong dissemination activity aimed at breaking the communication barriers between disciplines, at forming young researchers, and at bringing the field closer to a broad general audience.

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

### THURSDAY, 26 OCTOBER 2023

- 14:30 – 14:45 **OPENING**
- 14:45 – 15:20 Diego Luis Gonzalez  
(Institute for Microelectronics and Microsystems – CNR, Bologna, Italy)
- 15:20 – 15:55 Oreste Piro  
(Universidad de las Islas Baleares (UIB), Spain)
- 15:55 – 16:30 Coffee Break
- 16:25 – 17:00 Ivan Marqués Campillo  
(Universidad de las Islas Baleares (UIB), Spain)
- 17:00 – 17:35 Simone Giannerini  
(University of Bologna, Italy)
- 20:00 **DINNER**

## FRIDAY, 27 OCTOBER 2023

- 10:00 – 10:35 Stefano Piotto  
(University of Salerno, Italy)
- 10:35 – 11:10 Stella Logotheti  
(National Technical University of Athens, Greece)
- 11:10 – 11:45 Isil Takan  
(Karolinska Institutet, Stockholm, Sweden)
- 12:00 – 13:30 **LUNCH**
- 13:30 – 15:30 **ROUND TABLE**
- 15:30 – 16:00 **COFFEE BREAK**
- 16:00 – 18:00 **SOCIAL EVENT**
- 20:00 **DINNER**

## SATURDAY, 28 OCTOBER 2023

- 10:00 – 10:35 Julyan Cartwright  
(Instituto Andaluz de Ciencias de la Tierra, CSIC-UGR, Spain)
- 10:35 – 11:10 Pamela Knoll  
(The University of Edinburgh, Scotland)
- 11:10 – 11:45 Silvia Holler  
(University of Trento, Italy)
- 11:45 – 12:00 **CLOSING**
- 12:00 – 13:30 **LUNCH**

## SCIENTIFIC COMMITTEE

Diego L. Gonzalez (CNR-IMM Bologna)  
Simone Giannerini (University of Bologna)  
Greta Goracci (Free University of Bozen-Bolzano)

## ORGANIZING COMMITTEE

Simone Giannerini (Department of Statistical Sciences, University of Bologna)

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