PERSONAL INFORMATION:

Email: giorgio.tallarico@gmail.com
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Address: Casciago (VA), Italy
Nationality: italian
Date of birth: 23/04/1997

EXPERIENCE

- Visiting student at Cavendish Laboratory - University of Cambridge (winter 2021)

- Internship at ifom-the firc institute of molecular oncology (spring 2022)

- Summer school in optics at Università dell'Insubria and at Palacky University (summer 2014)

-private lessons in physics and mathematics for high school students (from 2016)

GIORGIO TALLARICO

Master student in Physics

PUBBLICATIONS & CURRENT WORKS

THRESHOLD ACCUMULATION OF A CONSTITUTIVE PROTEIN EXPLAINS E.COLI CELL-DIVISION BEHAVIOR IN NUTRIENT UPSHIFTS

Mia Panlilio, Jacopo Grilli, Giorgio Tallarico, Ilaria Iuliani, Bianca Sclavi, Pietro Cicuta, Marco Cosentino-Lagomarsino. PNAS May 4, 2021.

From the abstract: "This study leverages a high-resolution device to monitor single-cell growth division upon nutrient changes. Comparing these data with different mathematical models, we are able to discriminate among fundamentally different mechanisms of cell-division control. Furthermore we show that the data support a model where an unregulated protein accumulates to a threshold and triggers division."

CHROMOSOMAL LOCI MOBILITY AND CELL-CYCLE PROGRESSION IN E. COLI (IN PROGRESS)

By tracking single -cell growth and division events on the timescale of minutes and, simultaneously, by tracking time single chromosomal loci movements at the scale of seconds we want to understand if and how cell-cycle progression is coupled to the loci mobility.

EDUCATION

MASTER DEGREE IN PHYSICS

Università di Milano 2020-2022

Final thesis work "quantitative analysis of chromosomal loci mobility in response to cell-cycle progression" under the supervision of Professor Marco Cosentino-Lagomarsino and Professor Pietro Cicuta.

BACHELOR DEGREE IN PHYSICS

Università di Milano 2016-2020

Curriculum specialized on statistical physics and its application in biological systems. Final thesis "emerging laws for cell growth during a nutrient transition" under the supervision of Professor Marco Cosentino-Lagomarsino.

UPPER SCHOOL

Liceo scientifico Galileo Ferraris 2011-2016

SKILLS & ABILITIES

- Knowledge of many different programming languages: Python, C, C++, latex, Mathematica, Matlab, Julia.
- Modeling and statistical analysis skills acquired during my thesis works and during the internship at the ifom-the firc institute of molecular oncology.
- Basic knowledge on cell cultures and laboratory experience in making microfluidic devices (mother machines) at the University of Cambridge.
- Languages: Italian (mother tongue), English (fluent in reading and writing).
- Manual working experience: lathe and milling machine wood working in my family's workshop

HOBBIES & SPARE TIME ACTIVITIES

Curious by heart, I love to explore nature and doing every kind of outdoor activity. I am a rock climbing and hiking enthusiast and I have been practicing calisthenics since 2016. In the past I was in a rowing team from 2007 to year 2011. I partecipate to the "Italian rowing championship" in Varese.