



# Umberto Dellasette

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## ● ABOUT ME

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### Master studies

I am currently enrolled at the Sapienza University of Rome, where I am a Master student in Physics. My main interest is the application of physics to neuroscience.

### Undergraduate studies

In 2019, I enrolled at the University of Turin, where I completed my undergraduate degree in 33 months, which is 3 months less than the standard time to obtain a bachelor's degree in Italy. I graduated magna cum laude in Physics. My thesis was on the theoretical aspects of regulatory networks. With Professor Michele Caselle as my mentor and advisor, I addressed the open problem of the reliability of gene regulatory networks from the GTEx (genotype expression) database, aiming to see if and to what extent the experimental procedure is a determining factor in the topological structure of these networks. The method used to approach the problem was through the so-called motifs, a quite fundamental concept in the field of systems biology, topologically we searched, in human tissue networks, for the presence of enriched or depleted 3-node connected patterns. We were able to show some fundamental limitations in determining the reliability of the networks, and we showed that the analysis procedure also determined a substantial bias. My work has sparked interest, as other students are now using it as a basis for their current research.

### Related activities

Throughout my years at the University of Turin, I have also been involved in tutoring first-year students; I found this task really exciting and engaging, as I had a real opportunity to show younger students how to approach the university workload and how to live a healthy and constructive campus life. I have also tutored several high school students, and I find teaching very rewarding as it gives me the opportunity to give back what I have learned while consolidating my knowledge. I have also been a Boy Scout for over 12 years, in this environment I have learned about community life, service and leadership, all skills that have a great impact on my everyday life.

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*il sottoscritto dichiara di essere consapevole che il presente curriculum vitae sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.*

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