Since December 2022, I have been working as a Postdoctoral Researcher working at the Istituto Italiano di Tecnologia, in Genoa. I carry on my activity within the Atomistic Simulations group, led by prof. M. Parrinello, where I use Molecular Dynamics, Machine Learning and ab-initio simulations to study catalytic processes at the nanoscale. In 2021-2022 I worked as a Postdoctoral Researcher at the Laboratory of Interdisciplinary Physics (with prof. S. Suweis) at the University of Padua, Italy, where I used statistical physics and computer simulations for the study of DNA oligomers. I got my Bachelor (2014) and Master (2017) degrees in Physics and my PhD in Physics (2017-2021) at the University of Milan with prof. D. E. Galli. In particular, my research during PhD concerned computer simulations aimed at unveiling emergent properties in condensed matter, soft matter and complex systems. In all these projects, I have been routinely using High Performance Computing resources and I have been constantly collaborating with experimental groups.