

# Davide Revignas

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## Current position

*PhD student*, Doctoral Program in Science and Engineering of Materials and Nanostructures, University of Padua.

## Areas of specialisation

Physical Chemistry; Soft Matter Theory.

## Education

2017 BSc in Materials Science, University of Padua.  
2019 MSc in Materials Science, University of Padua.

## Technical skills and languages

- Programming ability in MATLAB and Python.
- Fluent in English (Cambridge ESOL Certificate, Level C1)

## Teaching experiences

2020/21 Integrative teaching for the course *Laboratorio di Chimica Fisica* for the Bachelor program in *Chimica Industriale* (20 hours).

## Publications & talks

### JOURNAL ARTICLES

2020 Revignas, Davide, and Alberta Ferrarini. "Interplay of Particle Morphology and Director Distortions in Nematic Fluids." *Physical Review Letters* 125.26 (2020): 267802.

2021 Revignas, Davide, and Alberta Ferrarini. "From Bend to Splay Dominated Elasticity in Nematics." *Crystals* 11.7 (2021): 831.

- 2022 Revignas, Davide, and Alberta Ferrarini. "Microscopic modelling of nematic elastic constants beyond Straley theory." *Soft Matter* 18.3 (2022): 648-661.

#### PRESENTATIONS AND POSTERS

- 2020 ITALIAN SOFT DAYS 2020: participation with the poster "Elasticity of Liquid Crystals: beyond Straley model" as presenter; online poster session, 23.09.20.
- 2021 11TH LIQUID MATTER CONFERENCE 2020/2021: participation with the poster "cDFT calculation of Frank elastic constants for non-convex particles" as presenter; online poster session, 19-23.07.21.
- 2021 18TH INTERNATIONAL CONFERENCE ON FERROELECTRIC LIQUID CRYSTALS: participation with the oral presentation "How shape polarity and concavity of mesogens affect Frank elastic constants" as presenter; Ljubljana, 09.09.21.