# **Cristian Villalobos Concha**

Curriculum Vitae

# **PERSONAL DETAILS**

Birth November 02, 1994

Address Av. Viel 1616. Dpto 1804. Santiago, Chile

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Nationality Chilean

# **EDUCATION**

B.S Physics 2013-2017

Pontificia Universidad Católica de Valparaíso.

M.S in Sciences, mention in Physics

Pontificia Universidad Católica de Valparaíso.

Phd Candidate- PhD in Sciences, mention in Physics

Universidad de Chile.

2019-date

## **SKILLS**

Languages Spanish (native) - English(intermediate)

Programming Matlab-Python

#### **TEACHING**

2016 - Teachers assistant of Experimental Electromagnetism. (PUCV).

2017 - Teachers assistant of Experimental Electromagnetism.(PUCV).

2017 - Teachers assistant of Theoretical Physics for Pedagogy in physics.(PUCV).

2018 - Teachers assistant of Experimental Electromagnetism. (PUCV).

2018 - Teachers assistant of Experimental Optics and Waves.(PUCV).

2018 - Teachers assistant of Electrodynamics.(PUCV).

2019 - Teachers assistant of Introduction to Classical Physics.(UCH).

2020 - Teachers assistant of Introduction to Classical Physics.(UCH).

2022 - Teachers assistant of Introduction to Classical Physics.(UCH).

2022 - Teachers assistant of Fluid Mechanics .(UCH).

2023 - Teachers assistant of Continuum Mechanics .(UCH).

2024 - Teachers assistant of Fluid Mechanics .(UCH).

#### **CONFERENCES**

- 2014 II Congreso Nacional de Estudiantes de Ciencias Físicas y Astronómicas.
- 2015 Southern Workshop on Granular Materials 2015.
- 2017 XV Latin American Workshop on Nonlinear Phenomena (LAWNP 2017).
- 2017 XVI International Workshop on Inestabilities and Nonequilibrium Structures.
- 2018 Sothern Workshop on Granular Materials 2018.
- 2020 Complex Fluid Seminar Series.
- 2021 The Physics of Living Matter.
- 2021 The Physics of Living Matter.
- 2022 Oral presentation on APS March Meeting.
- 2022 WE-Heraeus Summer School on Active Matter and Complex Media at the Institut d'Etudes Scientifiques de Cargèse, Corsica, France.

#### RESEARCH

Master Thesis - (2018-2019) - Crater Formation on Levitating Sands.

Phd Thesis - (2019-date) - Bacterial Fluctuation in Confined Spaces.

Internship:

Bacterial Shells (2019) - École Supérieure de Physique et de Chemie Industrielle.

Active Emulsion (2021) - École Supérieure de Physique et de Chemie Industrielle.

## **ARTICLES**

- 2022 Villalobos, C., Housset, M., & Varas, G. (2022). Geometrical description of impact cratering under microgravity conditions. Granular Matter, 24(2), 64.
- 2024 Villalobos, C., Soto, R., & Cordero. M.L. (2024). Passive particle confined to a sphere subject to an active noise (submitted)
- 2024 Villalobos, C., Soto, R., Cordero, M. L., Liu, Z., León, T. L., Linder, A., & Clément, E. (2024). Activity in confined bacterial baths (to be submitted)

## SCHOLARSHIPS AND AWARDS

- 2018 Second Place "Un Click al Conocimiento". (PUCV).
- 2018 Beca término de tesis (PUCV).
- 2020-2024 Beca ANID Doctorado Nacional.
- 2021. Program Scholarship Chile-France, from French Institute in Chile. Three months at PMMH laboratory at ESPCI, Paris, France, Sorbonne University.
  - 2022. Cover of Granular matter. Volume 24, Issue 2.