

Tadeu Tassis

PERSONAL INFORMATION

Citizenship: Brazilian

Webpage: tadeutassis.github.io

Contact: tadeutassis@gmail.com

EDUCATION

PhD in Physics, Federal University of ABC (UFABC), Brazil **2019–Present**
Thesis: Trapped ions beyond low intensity regimes
Supervisor: Prof. Fernando L. Semião

MSc in Physics, Federal University of Espírito Santo (UFES), Brazil **2017–2019**
Thesis: Topological solitons in scalar field theories in (1+1)-dimensions
Supervisor: Prof. Gabriel Luchini

BSc in Physics, UFES, Brazil **2013–2017**
Thesis: The Fermi-Pasta-Ulam-Tsingou problem (in Portuguese)
Supervisor: Prof. Gabriel Luchini

PUBLICATION LIST

Thermal transport through a single trapped ion under strong laser illumination

T. Tassis, F. Brito, and F. L. Semião
arXiv:2402.03937 (*Currently under review*)

Trapped ions beyond carrier and sideband interactions

T. Tassis and F. L. Semião
Physical Review A 107, 042605 (2023)

Collective coordinates for the hybrid model

C. F. S. Pereira, E. S. Costa Filho, and T. Tassis
International Journal of Modern Physics A 38, 2350006 (2023)

Some novel considerations about the collective coordinates approximation for the scattering of ϕ^4 kinks

C. F. S. Pereira, G. Luchini, T. Tassis, and C. P. Constantinidis
Journal of Physics A: Mathematical and Theoretical 54, 075701 (2021)

BPS states for scalar field theories based on \mathfrak{g}_2 and $\mathfrak{su}(4)$ algebras

G. Luchini and T. Tassis
Journal of High Energy Physics 2020, 11 (2020)

FELLOWSHIPS

2021–Present: PhD Scholarship from CAPES

2019–2021: PhD Scholarship from UFABC

2017–2019: MSc Scholarship from CAPES

2016–2016: Undergrad Research Scholarship from UFES

2015–2016: Undergrad Research Scholarship from UFES

EVENTS

VIII Paraty Quantum Information Workshop, Brazil (2023)

Poster: *Trapped ions beyond carrier and sideband interactions*

XLI Paulo Leal Ferreira Physics Conference, IFT-Unesp, Brazil (2018)

Poster: *Scattering of an electron by a Dirac monopole*

II School on Theoretical High Energy Physics, IFSC-USP, Brazil (2018)

School on Theoretical High Energy Physics, IFSC-USP, Brazil (2016)

Short Course on: Solitons in Classical Field Theories, IFSC-USP, Brazil (2016)

XXVI Winter Physics School, UFMG, Brazil (2015)

ACTIVITIES

Teaching assistant

Classical mechanics II, UFABC, Brazil (2022)

Lecturer: Prof. Fernando L. Semião

Thermal phenomena, UFABC, Brazil (2021)

Lecturer: Prof. Roberto M. Serra

Examining committees

BSc thesis defence of João Vitor Bastos Del Piero, UFES, Brazil (2019)

SKILLS

Languages

Portuguese, native

English, advanced

Spanish, basic

Programming Languages

Python, experience with NumPy, SciPy, Matplotlib, and QuTiP

Julia, experience with QuantumOptics.jl

C/C++, experience implementing basic numerical methods (e.g., RK4)

Mathematica, basic experience

Software

Linux

L^AT_EX