Giovanni Iannelli

Curriculum Vitae



Personal informations

Birth 12 August 1992, Bolzano (Bozen), Italy

Citizenship Italian

Status Graduate student

Education

2015-Present Master student in Theoretical Physics, Università di Pisa, Italy.

During my first year of Master's studies in Theoretical Physics I'm focusing on Quantum Field Theory, Statistical Physics and their computational aspects

2011-2015 Bachelor's Degree in Physics, Università di Pisa, Italy.

Thesis Bosons in an harmonic trap: Bose-Einstein condensation and a Path Integral Monte Carlo algorithm

Supervisor Ettore Vicari, professor at Università di Pisa

Description I discussed the Bose-Einstein Condensation in a system of non interacting bosons affected by an harmonic potential, then, I showed that the partition function of the system could be expressed in terms of Feynman Path Integrals. Considering a Path Integral in Statistical Mechanics as a weighted sum of paths, I presented a method to sample the paths corrisponding to the positions (or momenta) of bosons

Programming experience

C/C++ I studied C language in university, as it is part of the program of my Bachelor's Degree. Then, I studied C++ to write simple object-oriented programs and make usage of ROOT Cern libraries

FORTRAN 90 I've used FORTRAN 90 language and OpenMP and MPI on top of it to write parallel PDE solvers and Monte Carlo simulations

Python ciao

Git ciao

LATEX ciao

Others ciao

Languages

Self-assessment European level CEFR (C2 maximum evaluation)

Italian Mother language	Understanding		Speaking		Writing
	C2	C2	C2	C2	C2

Other courses and achievements

2010 First Certificate in English, University of Cambridge.

B2

- I took this exam when I was in high school, and it certificates the Council of Europe Level B2 in English
- 2015 Statistical Mechanics, Algorithms and Computation, École Normale Supérieure, Coursera MOOC.
 - This online course is an introduction to Monte Carlo algorithms and their applications in Statistical Mechanics and Quantum Statistical Mechanics, using the Path Integral and Density Matrixes framework. At the end of this course, an exam was scheduled, and I completed it as it is stated in this coursera.org certificate
- 2015 **High Performance Scientific Computing**, *University of Washington*, Coursera MOOC.

ciao