

GEORGIOS CHRISTOU

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EDUCATION

BSc, Physics, University of Cyprus
GPA: 8.59/10

2019-2023 (Expected)

High School Diploma, Archbishop Makarios III Lyceum
GPA: 19.22/20

2015 - 2018

RESEARCH EXPERIENCE

Wave function of the universe for the Starobinsky inflationary model
Undergraduate Internship, Project Supervisor: [Prof. Nicolaos Toubas](#)

Jun 2021 - Aug 2021
University of Cyprus

- The main purpose of this project was to see whether initial conditions favouring inflation are probable.
- We approximated the Starobinsky potential as a step function and we used the WKB approximation in the semiclassical regime in order to find the wave function for various values of the inflaton field.
- Using appropriate boundary conditions we constructed the quantum probability density distribution for this inflationary model.

Baryon spectrum using lattice QCD simulations

May 2022 - Jun 2022

Undergraduate Internship, Project Supervisor: [Prof. Constantia Alexandrou](#)

University of Cyprus

- Calculation of various baryon masses using correlator data generated from lattice QCD simulations.
- Using different computational methods we extracted the mass of each baryon from the effective mass by performing various fits for two ensembles.

Continuum limit of low-lying baryon masses

Sept 2022 - May 2023

BSc Thesis, Project Supervisor: [Prof. Constantia Alexandrou](#)

University of Cyprus

- The thesis was a continuation of the previous project and the purpose was to complete the calculations for the baryon mass spectrum.
- Using three different ensembles with different lattice spacings and various computational techniques it was possible to calculate the baryon mass spectrum at the continuum limit and compare the results to the experimental values.

AWARDS & ACHIEVEMENTS

Grade 5 Music Theory: The Associated Board of the Royal Schools of Music. Grade: Distinction

Electric Guitar Degree: Grade: Excellent

SKILLS

Programming: Fortran, Mathematica, C++, Python, ROOT, Bash/Shell

Languages: Greek (Native), English (IELTS Score: 8), French (Beginner)

Technical: Git, Github, \LaTeX , Linux, Unix

INTERESTS

- My hobbies include photography and especially wide-field and deep-sky astrophotography, as well as creating time-lapse videos. Moreover I enjoy playing guitar and listening to music.