

GEORGIOS CHRISTOU

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EDUCATION

MSc Particle and Nuclear Physics , University of Edinburgh, Edinburgh, Scotland	Sept 2023 - Present
BSc Physics , University of Cyprus, Nicosia, Cyprus Graduated with Excellence, 1 st in class, GPA: 8.66/10	Sept 2019 - Jun 2023
High School Diploma , Lyceum Makariou III, Larnaca, Cyprus Graduated with Excellence, GPA: 19.22/20	Sept 2015 - Jun 2018

RESEARCH EXPERIENCE

MSc Thesis <i>Proton structure and light quark Yukawa couplings</i> , Supervisor: Dr. Liza Mijović	Nov 2023 - Present <i>University of Edinburgh</i>
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CERN Summer Student Programme 2023 <i>CP asymmetries in charm decays</i> , Supervisors: Prof. Angelo Carbone , Dr. Federico Betti	Jun 2023 - Aug 2023 <i>LHCb Collaboration</i>
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- Development of new kinematic weighting algorithm for the measurement of CP asymmetries.
- Implementation of RapidSim and Particle Gun to simulate data.
The project report is on [CDS](#) and on [GitHub](#).

BSc Thesis <i>Baryon Spectrum using Lattice QCD</i> , Supervisor: Prof. Constantia Alexandrou	Sept 2022 - May 2023 <i>University of Cyprus</i>
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- The thesis was a continuation of the previous project and the purpose was to complete the calculations for the baryon mass spectrum.
- The first ever calculation of the low-lying baryon spectrum at the continuum limit using exclusively physical point twisted mass fermion ensembles.
- Calculation of the baryon mass spectrum at the continuum limit and comparison with experimental values.
- Prediction of previously unmeasured low-lying masses of doubly- and triply-charmed baryons.

Undergraduate Internship <i>Baryon masses from Lattice QCD</i> , Supervisor: Prof. Constantia Alexandrou	May 2022 - Jun 2022 <i>University of Cyprus</i>
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- Calculation of various baryon masses using correlator data generated from lattice QCD simulations.
- Implementation of methods for evaluating the low-lying baryon spectrum at finite lattice spacing.

Undergraduate Internship <i>Wheeler-DeWitt solution for Starobinsky potential</i> , Supervisor: Prof. Nicolaos Toumbas	Jun 2021 - Aug 2021 <i>University of Cyprus</i>
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- 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.

PUBLICATIONS

- A list of my publications can be found on my [INSPIRE](#) profile.

SKILLS

- **Programming:** Fortran, Mathematica, C++, Python, ROOT, Bash/Shell, Julia (Beginner)
- **Languages:** Greek (Native), English (IELTS Score: 8, Level: C1), French (Beginner)
- **Technical:** Git, GitHub, L^AT_EX, Linux, Unix

AWARDS & ACHIEVEMENTS

Valedictorian in the Department of Physics, University of Cyprus

Jun 2023

Awarded to the student with the highest GPA of the department

OTHER

Cypriot National Guard Military Service: Cyprus, 14 Months

Jul 2018 - Sept 2019

Rank: Private