Stanford

Dimitrios (Dimitris) Ntounis

- Ph.D. Student in Physics, admitted Summer 2022
- Ph.D. Minor, Computer Science
- Curriculum Vitae available Online

Bio

EDUCATION AND CERTIFICATIONS

- Master of Science, Stanford University , Physics (2024)
- Bachelor of Science, National and Kapodistrian University of Athens, Greece , Physics (2021)

LINKS

- Personal website: https://dntounis.github.io/
- Google Scholar: https://scholar.google.com/citations?user=5vCzegYAAAAJ&hl=en
- Inspire HEP Author Profile: https://inspirehep.net/authors/2649182
- LinkedIn: https://www.linkedin.com/in/dimitris-ntounis-76645b269/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Experimental Particle Physics, High Energy Physics, Future Colliders

PROJECTS

- ATLAS Experiment at the CERN LHC (June 2022 - present)
- Cool Copper Collider - SLAC National Accelerator Laboratory (6/1/2022 - present)
- CMS Experiment at the CERN LHC (2019 - 2022)

LAB AFFILIATIONS

- Caterina Vernieri, SLAC ATLAS Group (6/26/2023)
- Giorgio Gratta, Gratta Lab - Levitated Optomechanics (4/3/2023 - - 6/16/2023)
- Daniel Akerib, SLAC LUX-ZEPLIN (LZ) Group (1/9/2023 - - 3/24/2023)
- Caterina Vernieri, SLAC ATLAS Group (6/20/2022 - - 12/16/2022)

Publications

PUBLICATIONS

- **Measurement of the W-boson angular coefficients and transverse momentum in pp collisions at √s=13 TeV with the ATLAS detector** *EUROPEAN PHYSICAL JOURNAL C*

  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al

2026; 86 (5)

- **Higgs self-coupling measurement at a linear collider at 550 GeV** *EUROPEAN PHYSICAL JOURNAL PLUS*
  Berggren, M., Bliewert, B., List, J., Ntounis, D., Suehara, T., Tian, J., Torndal, J., Vernieri, C.
  2026; 141 (5)
- **Precise measurement of the t(t)over-bar production cross-section and lepton differential distributions in eμ dilepton events from √s=13 TeV pp collisions with the ATLAS detector** *EUROPEAN PHYSICAL JOURNAL C*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026; 86 (5)
- **Measurement of the top-quark mass using decays with a J/ψ meson at √s=13 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026
- **Measurement of the azimuthal anisotropy of charged particles in √s_{NN}=5.36 TeV ¹⁶O+¹⁶O and ²⁰Ne+²⁰Ne collisions with the ATLAS detector** *PHYSICAL REVIEW C*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026; 113 (4)
- **Measurement of coherent exclusive J/ψ → μ⁺ μ⁻ production in ultraperipheral Pb plus Pb collisions at √s_{NN}=5.36 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026
- **Search for Beyond the Standard Model physics with anomaly dvetection in multilepton final states in pp collisions at √s=13 TeV with the ATLAS detector** *EUROPEAN PHYSICAL JOURNAL C*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026; 86 (3)
- **Measurement of the top-quark Yukawa coupling from t(t)over-bar production in the lepton plus jets final state using pp collisions at √s=13 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2026
- **Beam-beam backgrounds for the Cool Copper Collider** *Journal of Instrumentation*
  Ntounis, D., Gordon, L., Gray, L., Mettner`, E., Barklow, T., Nanni, E. A., Vernieri, C., et al
  2026; 21 (02)
- **Search for squarks and gluinos in pp collisions at √s=13 TeV and 13.6 TeV in events with τ-leptons, jets and missing transverse momentum using the ATLAS detector** *EUROPEAN PHYSICAL JOURNAL C*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2025; 85 (12)
- **Evidence for the Dimuon Decay of the Higgs Boson in pp Collisions with the ATLAS Detector.** *Physical review letters*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2025; 135 (23): 231802
- **Search for resonant leptoquark production via lepton-jet signatures in pp collisions at √s=13 TeV and √s=13.6 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Collaboration, A. S., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, et al
  2025

- **Measurements and interpretations of W[±]Z production cross-sections in pp collisions at √s=13 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2025
- **Search for the production of a Higgs boson in association with a single top quark in pp collisions at √s=13 TeV with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2025
- **Search for a heavy charged Higgs boson decaying into a W boson and a Higgs boson in final states with leptons and b-jets in √s=13 TeV pp collisions with the ATLAS detector** *JOURNAL OF HIGH ENERGY PHYSICS*
  Aad, G., Aakvaag, E., Abbott, B., Abdelhameed, S., Abeling, K., Abicht, N. J., Abidi, S. H., Aboelela, M., Aboulhorma, A., Abramowicz, H., Abulaiti, Y., Acharya, B. S., Ackermann, et al
  2025
- **Study of High-Transverse-Momentum Higgs Boson Production in Association with a Vector Boson in the qqbb Final State with the ATLAS Detector** *PRL - Physical Review Letters*
  Ntounis, D., ATLAS Collaboration, et al
  2024; 132 (13)
- **Luminosity Studies for the Cool Copper Collider**
  Ntounis, D., Nanni, E., Vernieri, C.
  edited by Jeans, D., Tian, J.
  E D P SCIENCES.2024
- **Luminosity and beam-induced background studies for the Cool Copper Collider** *Physical Review Accelerators and Beams*
  Ntounis, D., Nanni, E. A., Vernieri, C.
  2024; 27 (6)
- **Search for resonant and nonresonant production of pairs of dijet resonances in proton-proton collisions at sqrt(s) = 13 TeV** *JHEP - Journal of High Energy Physics*
  Ntounis, D., CMS Collaboration, et al
  2023; 2023 (7)
- **A “Cool” route to the Higgs boson and beyond. The Cool Copper Collider** *JINST - Journal of Instrumentation*
  Vernieri, C., Nanni, E., Dasu, S., Peskin, M., Ntounis, D., et al
  2023; 18 (07)
- **Sustainability Strategy for the Cool Copper Collider** *PRX Energy*
  Breidenbach, M., Bullard, B., Nanni, E., Ntounis, D., Vernieri, C.
  2023; 2 (4): 047001