ANTHONY BADEA

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CAREER

Fellow, University of Chicago, Enrico Fermi Institute – *Advisors: David Miller, Karri DiPetrillo* 2023
Ph.D. Physics, Harvard University – *Advisor: John Huth* 2023
M.S. Physics, Harvard University 2020
Dual B.S. Physics & Mathematics, MIT – *Advisors: Yen-Jie Lee, Jesse Thaler* 2019

HONORS

- Schmidt AI in Science Fellowship**,** *University of Chicago* 2023
- Science Fellow**,** *Stanford University* (declined) 2023
- Frederick Sheldon Traveling Fellowship**,** *Harvard University* 2021
- Certificate of Distinction in Teaching**,** *Harvard University* 2020
- Graduate Prize Fellowship, *Harvard University* 2019
- Malcom Cotton Brown Outstanding Senior Experimentalist**,** *MIT Physics Department* 2019

PUBLICATIONS

- A data-driven and model-agnostic approach to solving combinatorial assignment problems in searches for new physics 2023
  Anthony Badea, Javier Montejo Berlingen
  arxiv:2309.05728
- A search for R-parity-violating supersymmetry in final states containing many jets in 13 TeV *pp* collisions with the ATLAS detector 2023
  ATLAS-CONF-2023-049
- The New Small Wheel Electronics 2023
  JINST 18 P05012 arxiv:2303.12571
- Solving Combinatorial Problems at Particle Colliders Using Machine Learning 2022
  Anthony Badea, William Fawcett, John Huth, Teng Jian Khoo, Riccardo Poggi, Lawrence Lee.
  Phys. Rev. D 106, 016001**,** arxiv:2201.02205
- Jet energy spectrum and substructure in e+e- collisions at 91.2 GeV with ALEPH archived data 2022
  Yi Chen, Anthony Badea, Austin Baty, Paoti Chang, Yang-Tien Chien, Gian Innocenti, Marcello Maggi, Christopher McGinn, Dennis Perepelitsa, Michael Peters, Tzu-An Sheng, Jesse Thaler, Yen-Jie Lee.
  JHEP06(2022)008**,** arxiv:2111.09914
- Measurements of two-particle correlations in e^+e^- collisions at 91 GeV with ALEPH archived data 2019
  Anthony Badea, Austin Baty, Gian Innocenti, Marcello Maggi, Christopher McGinn, Michael Peters, Tzu-An Sheng, Jesse Thaler, Yen-Jie Lee.
  Phys. Rev. Letter 123, 212002**,** arxiv:1906.00489

PRESENTATIONS

- Lessons for FCC-ee from QCD Measurements in LEP data 2020
  4th FCC Physics Workshop, *Virtual* (invited)
- The World of Open Data: ALEPH at LEP 2020
  Snowmass, *Virtual* (invited)
- Multi-Differential and Unbinned Measurements of Hadronic Event Shapes 2020
  ICHEP, *Virtual*
- Advancing Unfolding with Machine Learning 2020
  BOOST, *Virtual*
- Two-Particle Correlation in Archived ALEPH Data 2019
  JETSCAPE, *Texas A&M University, TX*
- Two-Particle Correlation in Archived ALEPH Data 2018
  ICHEP, *Seoul, Korea*

- Study of Event Shapes and Thrust in Archived ALEPH Data (Poster) 2018
  Quark Matter, *Venice, Italy*

TEACHING

- Harvard P145**,** Elementary Particle Physics w/ Melissa Franklin 2020