

Jake Bennett

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Curriculum Vitae

APPOINTMENTS

Assistant Professor of Physics and Astronomy <i>University of Mississippi</i>	August 2018 - Present <i>Oxford, MS</i>
Postdoctoral Research Associate / Research Physicist <i>Carnegie Mellon University</i>	June 2014 - August 2018 <i>Pittsburgh, PA</i>

PROFESSIONAL PREPARATION

Indiana University Ph.D. in Physics <i>An amplitude analysis of the $\pi^0\pi^0$ system in radiative J/ψ decays</i> with Dr. Matthew Shepherd	<i>May 2014</i>
Indiana University M.S. in Physics <i>Amplitude analysis of $\gamma p \rightarrow \pi^+\pi^-\pi^+n$ in GlueX simulations</i> with Dr. Matthew Shepherd	<i>December 2009</i>
Roanoke College B.S. in Physics & Mathematics (summa cum laude, valedictorian) Honors Thesis <i>Study of Radiative χ_c Decays</i> with Dr. Matthew Fleenor	<i>May 2008</i>

PROFESSIONAL SERVICE

US Belle II standing committee for Diversity, Equity and Inclusion *January 2022 - present*
One of four members of the US Belle II standing committee for Diversity, Equity and Inclusion, to which members are elected for two year terms by the US Belle II Institutional Representatives. Responsible for formation and oversight of the US Belle II bridge program consortium and ensuring equitable and inclusive climate and policies for US Belle II.

Belle II Computing Steering Group deputy chair *October 2021 - present*
Responsible for coordinating the procurement and efficient, stable operation of Belle II distributed computing resources.

US Belle II executive committee *January 2019 - present*
One of three members of the US Belle II executive committee, to which members are elected for two year terms by the US Belle Institutional Representatives. Responsible for coordination of US Belle II activities and mediation of any potential disputes.

Belle II data production coordinator*September 2016 - October 2021*

Responsible for defining the data production scheme for the experiment, coordinating communication between the Belle II leadership relating to data production, ensuring smooth production and processing of MC and data samples, and providing samples for analysis use in an efficient and timely manner

Belle II combined performance working group leader*May 2015 - September 2016*

Coordination of particle identification software efforts, characterization of performance, and systematics

TALKS

Invited Talks

1. “Charm lifetime measurements at Belle II,” *Conference on Flavor Physics and CP Violation*, Oxford, MS, USA, (May 23-27, 2022).
2. “Results from Belle and prospects for Belle II in spectroscopy,” *Heavy Quarks and Leptons 2021*, virtual, (September 13-17, 2021).
3. “Measurements of the standard model parameters in b and c decays,” *APS April Meeting 2020*, Washington DC, USA, (April 18-21, 2020).
4. “Light Hadron Spectroscopy at BESIII,” *Exotic Hadrons 2019*, Shanghai, China, (June 25-27, 2019).
5. “Exotic Quarkonium Physics Prospects at Belle II,” *Conference on Flavor Physics and CP Violation*, Victoria, BC, Canada May 6-10, 2019).
6. “Recent Results in Hadron Spectroscopy at Belle and prospects for Belle II,” *8th Workshop of the APS Topical Group on Hadronic Physics*, Denver, CO (April 10-12, 2019).
7. “Hadron spectroscopy studies at Belle II,” *XVI Mexican Workshop on Particles and Fields*, Puerto Vallarta, Mexico (October 2017).
8. “The Belle II Experiment: status and physics program,” *21st Particles and Nuclei International Conference (PANIC)*, Beijing, China (September 2017).
9. “Amplitude analyses at BESIII,” *2017 International Summer Workshop on Reaction Theory*, Bloomington, IN (June 2017).
10. “Amplitude analyses with charm decays at e^+e^- machines,” *CHARM 2016*, Bologna, Italy (September 2016).
11. “Physics prospects at Belle II,” *BEACH 2016*, Fairfax, VA (June 2016).
12. “Charmonium decays into light hadrons at BESIII,” *QWG 2016*, Richland, WA (June 2016).
13. “Recent progress in baryon spectroscopy at BESIII,” *HADRON 2015*, Newport News, VA (September 2015).
14. “New hadronic states at BESIII,” *APS April Meeting*, Baltimore, MD (April 2015).

Other Conference Talks and Seminars

1. “First collisions and plans for the future at Belle II,” *Wayne State University Physics Seminar*, Detroit, MI (October 2018).
2. “Performance of Belle II reconstruction software,” *4th Belle II Theory Interface Platform (B2TiP) Workshop*, Pittsburgh, PA (May 2016).
3. “First look at charm semileptonic,” *4th Belle II Theory Interface Platform (B2TiP) Workshop*, Pittsburgh, PA (May 2016).

4. “A model independent partial wave analysis of J/ψ decays to $\gamma\pi^0\pi^0$,” *JLab Advanced Study Institute on Techniques for Amplitude Analysis*, Williamsburg, VA (June 2012).
5. “Simulated amplitude analysis of the 3π system with the GlueX detector,” *School on Amplitude Analysis in Modern Physics from hadron spectroscopy to CP phases*, Bad Honnef, Germany (August 2011).
6. “Radiative χ_c decays,” *APS April Meeting*, St. Louis, MO (April 2008).

SELECTED PUBLICATIONS

ORCID ID 0000-0002-5440-2668

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Google Scholar: Jake Bennett

Refereed journal publications as a primary author:

1. F. Abudinen *et al.* (Belle II Collaboration), “Measurement of the Λ_c^+ lifetime”, arxiv:2206.15227 (Submitted to PRL).
2. J. T. McNeil *et al.* (Belle Collaboration), “Measurement of the resonant and non-resonant branching ratios in $\Xi_c^0 \rightarrow \Xi^0 K^+ K^-$ ”, *Phys. Rev. D.* **103**, 112002 (2021).
3. N. N. Achasov, J. V. Bennett, A. V. Kiselev, E. A. Kozyrev, and G. N. Shestakov, “Evidence of the four-quark nature of $f_0(980)$ and $f_0(500)$ ”, *Phys. Rev. D.* **103**, 014010 (2021).
4. E. Kou *et al.* (Belle II Collaboration), “The Belle II Physics Book”, *PTEP***12**, 123C01 (2019).
5. M. Ablikim *et al.* (BESIII Collaboration), “Amplitude analysis of the $K_S K_S$ system produced in radiative J/ψ decays”, *Phys. Rev. D.* **98**, 072003 (2018).
6. M. Ablikim *et al.* (BESIII Collaboration), “Amplitude analysis of the $\pi^0\pi^0$ system produced in radiative J/ψ decays”, *Phys. Rev. D.* **92**, 052003 (2015).
7. J. V. Bennett, M. Kornicer, M. R. Shepherd, and M. M. Ito, “Precision timing measurement of phototube pulses using a flash analog-to-digital converter”, *Nucl. Inst. Meth. A* **622**, 225 (2010).
8. J. V. Bennett *et al.* (CLEO Collaboration), “Observation of χ_{cJ} Radiative Decays to Light Vector Mesons”, *Phys. Rev. Lett.* **101**, 151801 (2008).