

List of Publications

James Beacham

April 17, 2024

A complete list of my publications can be found at [Inspire HEP](#) (including a full list of those as a member of the ATLAS collaboration). Below is a selection of papers for which I was the or a primary contributor, as well as a selection of reports I contributed to and/or endorsed. Refereed papers are indicated by †.

Papers: Primary Author or Contributor

1. **A very high energy hadron collider on the Moon** †
J. Beacham and F. Zimmermann
arXiv:2106.02048
[New J. Phys. 24 023029 \(2022\)](#)
Citations: 7
[HEP entry](#)
2. **Search for pairs of highly collimated photon-jets in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector** †
ATLAS Collaboration
arXiv:1808.10515
[PRD 99, 012008 \(2019\)](#)
Citations: 28
[HEP entry](#)
3. **Performance of the ATLAS global transverse-momentum triggers at $\sqrt{s} = 8$ TeV**
ATLAS Collaboration
<https://atlas.web.cern.ch/Atlas/GROUPS/PHYSICS/PUBNOTES/ATL-DAQ-PUB-2018-001/>
Citations: N/A
4. **Search for resonances in diphoton events with the ATLAS detector at $\sqrt{s} = 13$ TeV** †
ATLAS Collaboration
arXiv:1606.03833
[JHEP09 \(2016\) 001](#)
Citations: 262
[HEP entry](#)
5. **Search for new phenomena in events with at least three photons collected in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector** †
ATLAS Collaboration
arXiv:1509.05051
[EPJC 76 \(2016\) 4, 210](#)
Citations: 166
[HEP entry](#)
6. **Search for a New Gauge Boson in Electron-Nucleus Fixed-Target Scattering by the APEX Experiment** †
S. Abrahamyan *et al.* [APEX Collaboration]
arXiv:1108.2750
[Phys. Rev. Lett. 107, 191804 \(2011\)](#)
Citations: 383
[HEP entry](#)

7. **Search for neutral Higgs bosons decaying into four taus at LEP2** †

S. Schael *et al.* [ALEPH Collaboration]

arXiv:1003.0705

[JHEP 1005, 049 \(2010\)](#)

Citations: 90

[HEP entry](#)

Papers: As ATLAS sub-group convener; papers published under my coordination

1. **Search for magnetic monopoles and stable particles with high electric charges in 8 TeV pp collisions with the ATLAS detector** †

ATLAS Collaboration

arXiv:1509.08059

[PRD 93, 052009 \(2016\)](#)

Citations: 89

[HEP entry](#)

2. **A search for prompt lepton-jets in pp collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector** †

ATLAS Collaboration

arXiv:1511.05542

[JHEP 1602 \(2016\) 062](#)

Citations: 85

[HEP entry](#)

3. **Search for heavy long-lived multi-charged particles in pp collisions at $\sqrt{s} = 8$ TeV using the ATLAS detector** †

ATLAS Collaboration

arXiv:1504.04188

[EPJC \(2015\) 75:362](#)

Citations: 73

[HEP entry](#)

4. **Search for long-lived, weakly interacting particles that decay to displaced hadronic jets in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector** †

ATLAS Collaboration

arXiv:1504.03634

[PRD 92 \(2015\) 1, 012010](#)

Citations: 145

[HEP entry](#)

Reports and white papers: Editor

1. **Review of opportunities for new long-lived particle triggers in Run 3 of the Large Hadron Collider**

Editors J. Beacham, et al.

arXiv:2110.14675

[CERN-LPCC-2021-01](#)

Citations: 36

[HEP entry](#)

2. **Searching for long-lived particles beyond the Standard Model at the Large Hadron Collider** †

Editors J. Beacham and B. Shuve

arXiv:1903.04497; public March 2019

[J. Phys. G 47 090501 \(2020\)](#)

Citations: 373

[HEP entry](#)

3. **Long-lived particle signatures at the energy frontier**

J. Beacham, A. De Roeck, and J. Zurita

August 2020

[Snowmass 2021 Letter of Interest](#)

Citations: N/A

[HEP entry](#)

Reports, white papers, and community papers: Contributor, supporter, endorser

1. **Feebly Interacting Particles: FIPs 2022 workshop report**
C. Antel *et al.*
arxiv:2305.01715
[Eur.Phys.J.C 83 \(2023\) 12, 1122](#)
Citations: 74
[HEP entry](#)
2. **Muon Collider Forum Report**
K.M. Black *et al.*
arXiv:2209.01318
[FERMILAB-FN-1194](#)
Citations: 54
[HEP entry](#)
3. **The Road Ahead for CODEX-b**
G. Aielli *et al.*
arXiv:2203.07316
[2022 Snowmass Summer Study](#)
Citations: 23
[HEP entry](#)
4. **Feebly-Interacting Particles: FIPs 2020 Workshop Report** †
P. Agrawal *et al.*
arXiv:2102.12143
[Eur.Phys.J.C 81 \(2021\) 11, 1015](#)
Citations: 252
[HEP entry](#)
5. **An Update to the Letter of Intent for MATHUSLA: Search for Long-Lived Particles at the HL-LHC**
C. Alpigiani *et al.*
arXiv:2009.01693
[CERN-LHCC-2020-014 \(2020\)](#)
Citations: 83
[HEP entry](#)
6. **Physics Beyond Colliders at CERN: Beyond the Standard Model Working Group Report** †
J. Beacham *et al.*
arXiv:1901.09966
[J.Phys. G 47 \(2020\) no.1, 010501](#)
Citations: 513
[HEP entry](#)
7. **Dark Matter Benchmark Models for Early LHC Run-2 Searches: Report of the ATLAS/CMS Dark Matter Forum** †
C. Doglioni *et al.*
arXiv:1507.00966
[Physics of the Dark Universe 100371 \(2019\)](#)
Citations: 657
[HEP entry](#)
8. **A Letter of Intent for MATHUSLA: A Dedicated Displaced Vertex Detector above ATLAS or CMS**
C. Alpigiani *et al.*
arXiv:1811.00927
[CERN-LHCC-2018-025 \(2018\)](#)
Citations: 95
[HEP entry](#)

9. **Dark Sectors and New, Light, Weakly-Coupled Particles**

R. Essig, J. A. Jaros, W. Wester, P. H. Adrian, S. Andreas, T. Averett, O. Baker and B. Batell *et al.*

arXiv:1311.0029

[YITP-SB-36 \(2013\)](#)

Citations: 782

[HEP entry](#)

10. **Status Report of the DPHEP Study Group: Towards a Global Effort for Sustainable Data Preservation in High Energy Physics**

Z. Akopov *et al.* [DPHEP Study Group Collaboration]

arXiv:1205.4667

[DPHEP-2012-001 \(2012\)](#)

Citations: 41

[HEP entry](#)

11. **Fundamental Physics at the Intensity Frontier**

J. L. Hewett, H. Weerts, R. Brock, J. N. Butler, B. C. K. Casey, J. Collar, A. de Gouvea and R. Essig *et al.*

arXiv:1205.2671

[ANL-HEP-TR-12-25, SLAC-R-991, FERMILAB-CONF-12-879-PPD \(2012\)](#)

Citations: 436

[HEP entry](#)

Proceedings

1. **APEX: A Prime EXperiment at Jefferson Lab**

J. Beacham

arXiv:1301.2581

[HEP entry](#)

2. **APEX: A Prime EXperiment at Jefferson Lab**

J. Beacham

Frascati Phys. Ser. **56**, 2 (2012).

[HEP entry](#)

3. **Higgs to Four Taus at ALEPH**

J. Beacham [ALEPH Collaboration]

arXiv:1006.2491

[HEP entry](#)