

High Energy Physics - Phenomenology

Topological Pions

Yang Bai, Adam Martin

(Submitted on 15 Mar 2010)

We study the collider signatures of new pions, composite particles which emerge from a TeV-scale, confining gauge theory with vector-like matter. Similar to the neutral pion in QCD, these new pions mainly decay into a pair of standard model (SM) gauge bosons via triangular anomaly diagrams. One of the new pions, which decays to a gluon plus a photon, has excellent discovery potential at the LHC.

Comments: 5 pages, 5 figures.

Subjects: **High Energy Physics - Phenomenology (hep-ph)**; High Energy Physics - Experiment (hep-ex)

Report number: FERMILAB-PUB-10-003-T

Cite as: [arXiv:1003.3006v1](https://arxiv.org/abs/1003.3006v1) [hep-ph]

Submission history

From: Yang Bai [[view email](#)]

[v1] Mon, 15 Mar 2010 19:43:38 GMT (388kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PostScript](#)
- [PDF](#)
- [Other formats](#)

Current browse context:

hep-ph

[< prev](#) | [next >](#)[new](#) | [recent](#) | [1003](#)

Change to browse by:

[hep-ex](#)

References & Citations

- [SLAC-SPIRES HEP](#)
([refers to](#) | [cited by](#))

Bookmark([what is this?](#))

 [CiteULike logo](#) [Connotea logo](#) [BibSonomy logo](#) [Mendeley logo](#) [Facebook logo](#) [del.icio.us logo](#) [Digg logo](#) [Reddit logo](#)