

Biographical Sketch — Joey Huston

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Education:

B.S. Carnegie-Mellon University, 1976.
Ph.D. University of Rochester, 1983.

Positions Held:

Research Associate: University of Rochester, Rochester, New York, 1983-85
Visiting Assistant Professor: Michigan State University, East Lansing, 1985 - 86.
Assistant Professor: Michigan State University, East Lansing, 1986 - 91.
Associate Professor: Michigan State University, East Lansing, 1991 - 98.
Professor: Michigan State University, East Lansing, 1998 - present.
Visiting Professor: Institute for Particle Physics Phenomenology, Durham University, Durham, UK, 2003-present.

Professional:

Member, American Physical Society (APS Fellow)
Co-spokesman of CTEQ Collaboration 2006 - present

Selected Publications Relevant to Proposal

1. Hard Interactions of Quarks and Gluons: a Primer for LHC Physics, J. Campbell, J. Huston, W.J. Stirling, Rept. Prog. Phys. 70, 89 (2007); <http://stacks.iop.org/0034-4885/70/89>.
2. Jets in Hadron-Hadron Collisions, to appear in Prog. Part. Nucl. Physics, S. Ellis, K. Hatakeyama, J. Huston, P. Loch, M. Toennessman; Prog. Part. Nucl. Phys. **60**, 484 (2008).
3. Inclusive Jet Production, Parton Distributions and the Search for New Physics, J. Huston et al., JHEP 0310, 046 (2003).
4. Measurement of the Inclusive Jet Cross Section in Interactions at $\sqrt{s}=1.96$ -TeV Using a Cone-based Jet Algorithm," J. Huston et al. Phys. Rev. D 74, 071103 (2006).
5. QCD at High Energies, J. Huston, proceedings of XXIXth Conference in High Energy Physics (Vancouver 1998).

JH has over 400 publications with greater than 20,000 citations including 7 renown papers (more than 500 cites), 3 of which are experimental papers and 4 phenomenology.

Synergistic Activities

JH is the co-spokesman of the CTEQ collaboration. He is a visiting professor at the Institute for Particle Physics at Durham University (UK) and has been invited as a Distinguished Visitor by the the Scottish Universities Physics Alliance (SUPA). In September of 2007, he was invited by the French ATLAS physics groups to give a talk on Standard Model benchmarks at their annual meeting and has given talks on related subjects at three of the US ATLAS physics meetings. He has organized many workshops, including five at Les Houches, at Santa Barbara (a 3 month workshop at the Kavli Institute), at Cambridge University and at Fermilab (TeV4LHC). He delivered the plenary talk on QCD at the 1998 International Conference in High Energy Physics held in Vancouver and the plenary talk on Photon and Drell-Yan physics at the 1989 Lepton-Photon meeting at Stanford. He is one of the authors of the Handbook on Perturbative QCD, published by CTEQ in the Reviews of Modern Physics. He is one of the authors of the CTEQ parton distribution functions and has worked on developing many phenomenology tools (such as parton error pdfs , the Les Houches accords) crucial for todays experimental analyses. He has published recent review articles on physics at the LHC and on jet production in hadron-hadron colliders. He is an author for the Reviews of Particle Properties by the Particle Data Group (with responsibility for jet and W/Z cross section measurements) and has written an Explain it in 60 seconds article on jets for the Symmetry magazine that appeared in the November 2007 issue.

JH was a member of the Fermilab Users Executive Committee from 1995-1996 and 2002-2003. He organized the 1995, 2002 and 2003 UEC trips to Washington. In 1996, he was appointed by the Fermilab director to an ad hoc Public Policy Committee to deal with relations with both Congress and the Administration. In 2007, he was elected to the first executive committee for the newly formed US LHC Users Organization.

Collaborators and Other Affiliations:

i. Collaborators

- a. The CDF Collaboration, www-cdf.fnal.gov/cdfmemb.html
- b. The ATLAS Collaboration, graybook.cern.ch/programmes/experiments/ATLAS.html

ii. Graduate and Postdoctoral Advisors

- a. Ph.D thesis: Prof. Fred Lobkowicz, University of Rochester
- b. Postdoctoral advisor: Prof. Tom Ferbel, University of Rochester

iii. Thesis Advising and Postgraduate Scholar Sponsor

- a. Thesis advisor for Lee Sorrell, Simona Murgia, (Valeria Tano, Matthias Tonnesmann; formal advisor was Siggie Bethke but they were working with me on CDF as visitors at MSU), Gene Flanagan, Brian Martin, Mohammad Hussein
- b. Postdoctoral advisor for John Mansour, Carlos Yosef, Ben Cooper, Andrea Messina, Mario Campanelli