

Approved by the Regents  
May 15, 2008

PROMOTION RECOMMENDATION  
The University of Michigan  
College of Literature, Science, and the Arts

James D. Wells, associate professor of physics, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of physics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1995	University of Michigan
M.S.	1990	Brigham Young University
B.S.	1988	Brigham Young University

Professional Record:

2007 – present	Staff Scientist, European Laboratory for Particle Physics (CERN)
2004 – present	Associate Professor, Department of Physics, University of Michigan
2002 – present	Member, Michigan Center for Theoretical Physics, University of Michigan
2002 – 2004	Assistant Professor, Department of Physics, University of Michigan
2001 – 2002	Scientist, Lawrence Berkeley National Laboratory, University of California, Berkeley
2001	Guest Professor, Deutsches Elektronen-Synchrotron
1999 – 2002	Assistant Professor, Department of Physics, University of California, Davis
1999 – 2001	Participating Guest, Lawrence Berkeley National Laboratory, University of California, Berkeley
1998 – 1999	Fellow, Theory Division, CERN
1995 – 1998	Research Associate, Stanford Linear Accelerator Center, Stanford University

Summary of Evaluation:

Teaching – Professor Wells is an excellent teacher at both the undergraduate and advanced graduate level. Since his promotion, he has mainly focused on graduate level courses, developing two new advanced graduate courses which are closely related to his research area. In addition, he is closely involved with undergraduate and graduate research, and has been very successful in involving undergraduates into his research program. Overall, he is a strong asset to the educational mission of the Department of Physics.

Research – Professor Wells works in theoretical particle physics with an emphasis on “beyond the standard model.” He has an understanding of the experimental issues and this allows him to be a leader in interpreting new discoveries and allows him to help the experimenters search more effectively for new discoveries. His work is outstanding – it has breadth and originality, and is widely cited. Professor Wells has an international reputation and is a recognized leader in particle physics based on the data from the Large Hadron Collider (LHC) at CERN and other sources.

Recent and Significant Publications:

“Narrow trans-TeV Higgs Bosons and  $H \rightarrow hh$  decays: Two LHC search paths for a hidden sector Higgs Boson,” with M. Bowen and Y. Cui, *Journal of High Energy Physics*, 0703, 2007, 036, hep-ph/0701035.

Jason L. Evans, David E. Morrissey, James D. Wells, “Higgs boson exempt no-scale supersymmetry and its collider and cosmology implications,” with J. L. Evans, et al., *Physical Review D*, 75, 2007, 055017, hep-ph/0611185.

“Bringing hidden dimensions into view,” *Science*, 311, 2006, p. 40.

“PeV-scale supersymmetry,” *Physical Review D*, 71, 2005, 015013, hep-ph/0411041.

Service – Professor Wells served as the graduate associate chair for three years. As an associate chair he also served as an ex-officio member of the Executive Committee, was a member of the decision making body for assistant professor promotions, and served on the Tenure Review Panel for three assistant professors.

External Reviews:

Reviewer (A)

“Jim is one of the very best phenomenologists in the world independent of age. ... Jim played a leading role in a series of highly cited papers... Wherever Jim goes, he raises the standards tremendously because of his computational power, integrity and strong physical intuition.”

Reviewer (B)

“Prof. Wells is a solid, mature, and talented theoretical physicist who is a leader in the phenomenology of particle physics. ... He has given important contributions to studies of new physics effects... Prof. Wells is a leading expert...and, in my opinion, one of the best in the world. ... I strongly recommend the promotion of Prof. Wells at the University of Michigan.”

Reviewer (C)

“You should definitely promote Jim Wells to a Full Professorship position. ...he ranks among the top in his area... ..it is hard to see anyone of his age who is clearly better.”

Reviewer (D)

“Professor Wells is one of the very best people in the world... His papers are extremely thorough and careful and exhibit outstanding taste and judgment.”

Reviewer (E)

“Wells is one of the community’s true experts on the phenomenology of new particles at hadron colliders. ...a number of Wells’ early publications now have the status of classics in our field. ... Any member of the community of theoretical particle physicists will rank these among the most important papers on physics beyond the standard Model.”

Reviewer (F)

“James is very well known and has earned a well deserved international reputation. ...he has consistently making very useful contributions and writing excellent papers. Over two dozen of his papers have already received more than 50 citations! We would certainly consider him a great asset if he were in our group.”

Reviewer (G)

“Jim has worked on a broad range of subjects and in all of them he has left a lasting influence due to the high quality of his work. He is an excellent physicist and an equally good educator. ... He has already made very relevant contributions to this field and he is already a leader in the field of particle physics.”

Reviewer (H)

“It is a pleasure to write in strong support of the promotion of James D. Wells... He writes exceptionally well and always has something interesting to say. His close attention to experimental implications is a valuable and rare commodity among today’s theorists. ...his papers convey the beauty and simplicity of whatever subject he addresses.”

Summary of Recommendation:

Professor Wells is highly productive and his leadership is internationally recognized. He is a strong teacher of students at all levels. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor James D. Wells be promoted to the rank of professor of physics, with tenure, in the College of Literature, Science, and the Arts.



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Terrence J. McDonald  
Arthur F. Thurnau Professor,  
Professor of History, and Dean  
College of Literature, Science, and the Arts

May 2008