

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

Wolfgang B. Lorenzon, 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:

1988	Ph.D.	University of Basel
1984	Diploma	University of Basel

Professional Record:

2000 – present	Associate Professor, Department of Physics, University of Michigan
1997 – 1998	Deputy Spokesman, HERMES Experiment, Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany
1996 – 2000	Assistant Professor, Department of Physics, University of Michigan
1996 – 1998	Visiting Scientist, DESY, Hamburg, Germany
1994 – 1996	Assistant Professor, Department of Physics and Astronomy, University of Pennsylvania

Summary of Evaluations:

Teaching – Professor Lorenzon has made excellent contributions to the teaching mission of his Department by offering a wide range of introductory and intermediate courses. He has managed to teach a number of difficult classes with considerable success. Students are impressed with his clear explanations and commitment to their understanding of complex concepts. He has been a first rate mentor to students at all levels, and some have won prizes that include the Sokol, Cornwall, and William L. Williams awards.

Research – Professor Lorenzon’s research area is medium energy nuclear and particle physics. He has provided fundamental new insights into the structure of the nucleon and how it is affected by the nuclear medium. He has chosen to work on significant questions in physics, and is unique in working on the smallest scale, the interior of atoms, and the largest scale, the distant edge of the universe.

Recent and Significant Publications:

- “The HERMES polarized hydrogen and deuterium internal gas target,” with A. Airapetian, et al., *Nuclear Instruments and Methods in Physics Research A*, A540, 2005, p. 68.
- “Search for an exotic $S=-2$, $Q=-2$ baryon resonance at a mass near 1862 MeV in quasi-real photoproduction,” with A. Airapetian, et al., *Physics Review*, D71, 2005, p. 032004.
- “Nuclear polarization of molecular hydrogen recombined on a non-metallic surface,” with A. Airapetian, et al., *European Physics Journal*, D29, 2004, p. 21.
- “Weak lensing from space I: Instrumentation and survey strategy,” with J. Rhodes, et al., *Astropart. Phys.* 20, 2004, p. 377.

Service – Professor Lorenzon has worked on several thesis award committees and coordinated the weekly Graduate Student Mini-Colloquium. Locally, he serves as a consultant to the Ann Arbor Hands-On Museum. He has worked on the ‘Solve-It Central’ exhibit funded by the National Science Foundation. He has served the international science community through his appointment as Deputy Spokesman for the HERMES collaboration, which consists of 170 physicists from 32 institutions in twelve countries.

External Reviews:

Reviewer (A)

“...HERMES is a collaboration of some 170 physicists, of which he was deputy spokesperson in 1997-1998. Lorenzon has been a constructive, diligent member of the collaboration.”

Reviewer (B)

“Dr. Lorenzon has played a crucial leadership role in the HERMES collaboration, particularly with regard to the pentaquark search which has resulted in a *Physics Letter B* paper with more than 250 citations. I have a very high opinion of Dr. Lorenzon’s accomplishments...”

Reviewer (C)

“Prof. Lorenzon’s achievements are the basis for over a decade of highly productive data taking by the HERMES collaboration. ...Lorenzon has made important contributions to the field... His international stature is underscored by his impressive list of talks to conferences and workshops around the world.”

Reviewer (D)

“Wolfgang is one of the most competent modern-day nuclear/particle physicists I know, with large expertise in utilizing spin degrees of freedom. He definitely ranks among the top 10%, possibly the top 5%, of the physicists I know within the field. The number of refereed publications he has at this stage of his career is without a doubt excellent within this field, with many of them having big impact.”

Reviewer (E)

“...Wolfgang has all the elements required of a distinguished scholar and has effectively demonstrated his mastery of each one. He has outstanding scientific taste, choosing important problems, and ones where he can make a real impact.”

Reviewer (F)

“I find certainly, Prof. Lorenzon is among the best. He is one of the scientific leaders in the senior members of the HERMES experiment. ...he has excellent powers of communication, give[s] clear engaging talks, and has good rapport with his audiences and peers.”

Reviewer (G)

“He has shown himself to be an excellent physicist and an able group leader. ... His publication list is solid, with several papers that are highly cited and rank among the important ones in the field. ...I have a very high opinion of Wolfgang Lorenzon as a scholar.”

Reviewer (H)

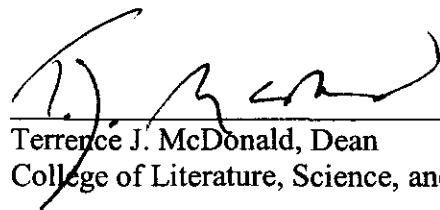
“His contribution to the search for pentaquark structures, a recent topic of immense interest, belongs in my opinion to a list of recent most significant achievements in the field.”

Reviewer (I)

“The many presentations Wolfgang was invited to give at international conferences are ample proof of the recognition of his efforts by the large international community of physicists interested in nucleon structure.”

Summary of Recommendation:

Professor Lorenzon’s research, teaching and leadership are excellent. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Wolfgang B. Lorenzon be promoted to the rank of professor of physics, with tenure.



Terrence J. McDonald, Dean
College of Literature, Science, and the Arts

May 2006