

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

Dragan Huterer, assistant professor of physics, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of physics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D. 2001 University of Chicago
B.S. 1996 Massachusetts Institute of Technology

Professional Record:

2007 – present Assistant Professor, Department of Physics, University of Michigan
2004 – 2007 National Science Foundation Post-doctoral Fellow, Kavli Institute for
Cosmological Physics and the Department of Astronomy and
Astrophysics, University of Chicago
2001 – 2004 Research Associate, Department of Physics Department, Case Western
Reserve University

Summary of Evaluation:

Teaching – Professor Huterer is a dedicated and capable teacher at both undergraduate and graduate levels. Overall, he has taught six different courses that span the range of introductory undergraduate to specialized, graduate-level courses. He uses a formal teaching style that emphasizes blackboard derivations, encouraging interaction and questions from students in the process. His teaching evaluations point to an excellent instructor connecting appropriately with his students.

Research – Professor Huterer is a theoretical physicist who works primarily in the area of phenomenological cosmology, with an emphasis on dark energy, cosmic microwave background, and primordial fluctuations. He is a driving force behind efforts to systematize studies of the dark side of the universe, which is the central problem of cosmology today. Professor Huterer has published 34 refereed papers of significant impact. He has been invited to speak at scientific meetings, to assist in the planning of major experiments, and to serve on several scientific panels. He is funded by the National Aeronautics Space Administration (NASA), Department of Energy (DoE), and National Science Foundation (NSF) – three of the major contributors to cosmological research.

Recent and Significant Publications:

“Missing power vs low- l alignments in the cosmic microwave background: No correlation in the standard cosmological model,” with D. Sarkar, et al., *Astroparticle Physics*, 34, 2010, p. 591.
“Weak lensing, dark matter, and dark energy,” *General Relativity and Gravitation*, 42, 2010, p. 2177.

“The imprints of primordial non-gaussianities on large-scale structure: Scale dependent bias and abundance of virialized objects,” with N. Dalal, et al., *Physical Review D*, 77, 2008, p. 123514.

“Falsifying paradigms for cosmic acceleration,” with M. Mortonson and W. Hu, *Physical Review D*, 79, 2008, p. 023004.

Service – Professor Huterer is performing service for the Physics Department and the Michigan Center for Theoretical Physics. On the national level, Professor Huterer has served on proposal review panels for the DOE, NASA, and NSF. He has refereed papers for the leading scholarly journals in his field. His profile in the international community is reflected by his service on a DOE/NASA panel charged with defining Figures of Merit for the Joint Dark Energy Mission (JDEM) competition.

External Reviews:

Reviewer (A)

“...Huterer is one of the more prominent and productive phenomenological cosmologists in his cohort...I am happy to support his promotion.”

Reviewer (B)

“...Dragan gets things done. ...he has been a crucial engine in getting the actual work done. Not just the busy work, but the heavy intellectual lifting. ... I would consider it an exciting hire and Dragan an outstanding addition to our department. Better recommendation than that I cannot offer. You should definitely promote and tenure him at Michigan.”

Reviewer (C)

“As we consider how to build large and very expensive new surveys, Dragan’s work on experimental design has been helpful and well received. Certainly it has led to a healthy amount of grant support. ...in a tenure decision, one likes to see evidence that the candidate has had a significant discovery... In Dragan’s case this is an emphatically positive answer. ... I think this demonstrated performance places him well above the bar for promotion and tenure.”

Reviewer (D)

“Prof. Huterer is one of the world leaders in high-precision cosmological phenomenology. ... [he] is one of a handful of top researchers of his generation. ... Prof. Huterer has made several major and lasting contributions. ...I am confident that Prof. Huterer would be awarded tenure in my department... I recommend him highly, without reservation, for promotion...”

Reviewer (E)

“He has amassed an outstanding body of work in a diverse range of subjects... Huterer is perhaps best known for his considerable body of work on cosmological tests of dark energy, a subject for which he is recognized as a world expert. ...Huterer is very well qualified for a promotion to tenure... ..he has hit a clear home run that has had major impact on the field.”

Reviewer (F)

“...Dragan Huterer is noted for doing work that is sensible, reliable, and helpful to advancing the field. ...he has done an excellent job of addressing wider audiences of astronomers and

physicists who know that the dark energy is an important issue, but need an interpreter, like Dragan, to help understand the issues.”

Reviewer (G)

“Dragan is very well known in the cosmology community for his excellent work on how to characterize dark energy. ... The tools that Dragan developed, specifically his principle component analysis...has been the most valuable tool that I have found for quantifying what we know about dark energy. ... Overall Dragan has amassed an impressive record of phenomenology in fundamental cosmology.”

Reviewer (H)

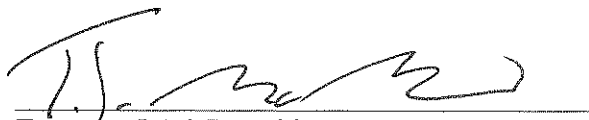
“Huterer’s studies of primordial non-gaussianity develop a unique probe of the very early universe. ... Huterer’s work is internationally recognised [sic], as is apparent from his record of invited lectures and participation in conferences.”

Reviewer (I)

“To summarize simply: Dragan is one of the rising stars of theoretical cosmology.”

Summary of Recommendation:

Professor Huterer has shown the highest intellectual quality, productivity, and leadership in creating and disseminating knowledge in physics. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Dragan Huterer be promoted to the rank of associate professor of physics, with tenure, in the College of Literature, Science, and the Arts.



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

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