

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

Sally Oey, assistant professor of astronomy, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of astronomy, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1995	University of Arizona
A.B.	1986	Bryn Mawr College

Professional Record:

2004 – present	Assistant Professor, Department of Astronomy, University of Michigan
2004	Associate Astronomer, Lowell Observatory
2001 – 2004	Assistant Astronomer, Lowell Observatory
1998 – 2001	Institute Fellow, Space Telescope Science Institute
1995 – 1998	Postdoctoral Research Fellow, Institute of Astronomy, University of Cambridge

Summary of Evaluation:

Teaching – Professor Oey is an effective teacher at all levels of instruction. Her classes are well received by students and her evaluations are on a par with the rest of the astronomy faculty. She has taught a wider variety of classes than do most faculty in their first five years, and has taught a new class every year. During winter term 2009 she introduced a new class entitled “The Cosmos Through the Constellations” as part of the theme semester she organized. She has played a major role in the improvement of existing classes and has been an enthusiastic innovator. Professor Oey has been an energetic mentor to many undergraduate students and coauthored four refereed publications with them. Four of her undergraduates have gone on to excellent graduate programs. She has also recruited two graduate students to work with her.

Research – Professor Oey is an expert on the stellar populations of galaxies – the characterization of the numbers of stars of different types, the mass and chemical composition in galaxies, and on the evolution of those populations. Her research focuses on the ways stars influence the interstellar medium of their host galaxies. Her work is characterized by very original and creative approaches, and she brings much more insight to her observational data than does the typical observer. Professor Oey has been quite successful obtaining funding for her research. Her publication record is strong and well cited.

Recent and Significant Publications:

“A reexamination of observed and predicted stellar ionizing fluxes in the large magellanic cloud,” with E.S. Vogel, et al., *The Astronomical Journal*, 135, 2008, p. 1291.
 “Tracing the thick disk to solar metallicities,” with T. Bensby, et al., *Astrophysics Journal Letters*, 663, 2007, p. L13.
 “Statistical confirmation of a stellar upper mass limit,” with C. J. Clarke, *Astrophysics Journal Letters*, 620, 2005, p. L43.

“Massive field stars and the stellar clustering law,” with N. L. King and J. W. Parker, *The Astronomical Journal*, 127, 2004, p. 1632.

Service – Professor Oey has served on the departmental curriculum committee as well as search and evaluation committees. She has organized three sets of public talks by distinguished lecturers and has led the effort to organize the Theme Semester to align with the International Year of Astronomy. Nationally, she has served on the organizing committees for several meetings and on important visiting, oversight, and director search committees in roles normally held by senior faculty.

External Reviews:

Reviewer (A)

“...although Sally is still predominantly an observer, she has continued to produce some quite theoretical papers, including several single author papers... This is a quality that sets her apart from many of her peers in this field... she presents an integrated program within the field of massive star formation and feedback. ...her long term presence in Michigan will reap great benefits to your very active department.”

Reviewer (B)

“With her record of achievement and originality, Sally would be a very strong candidate for promotion to a comparable level at our institution. I also note her active involvement with postdocs and students, her contributions to outreach, her good record with grants, and the number of times which she has been invited to give major reviews at international conferences.”

Reviewer (C)

“The role of feedback for stars is a key problem for understanding the growth of baryonic structures ranging from stars to galaxies. This area of work is important but difficult and not widely distributed, especially in terms of the breadth of Prof. Oey’s program. It clearly belongs in academic programs such as that at Michigan with strong efforts extending from galaxy formation and cosmology to star formation processes. ... Oey is a lively, productive, and thoughtful scientist.”

Reviewer (D)

“Sally Oey is a leader in one of the most important areas in astrophysics, and deserves this promotion. ... She is a clear thinker, has good analytic skills, asks tough and penetrating questions is highly creative and very energetic. She is not at all afraid to ‘think outside the box’, which is a rare and valuable attribute...”

Reviewer (E)

“From my first interactions with Sally she stood out as an unusually independent and original thinking scientist. ...Sally’s work straddles...stellar, galactic, and extragalactic astronomy and the ISM [Interstellar Medium], as well as the phenomenological boundary between observations and theory. As a result of this unconventional approach Sally has made important contributions to problems ranging from star formation, chemical evolution and the ISM dynamics of galaxies.”

Reviewer (F)

“The work by Dr. Oey is creative, innovative and important. Her technique to condense important findings of her observational work in simple analytic key relationships, which can then be used to interpret the global properties of star forming galaxies, is a very elegant approach, which yield excellent and far-reaching results. In her field, she is one of the very few who are capable of combining all the important work on massive stars in galaxies into a coherent and compelling picture of galaxy evolution.”

Reviewer (G)

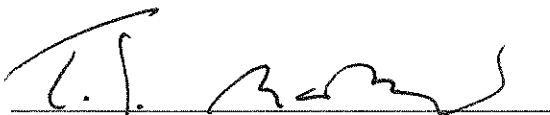
“I am most pleased to clearly support the excellent candidature of Prof. Sally Oey to the rank of associate professor with tenure. She is really an outstanding researcher, with many...valuable scientific results. Her dynamism, professional skills and her capacity in [sic] delivering excellent talks makes Sally Oey a first rank candidate...”

Reviewer (H)

“Oey occupies a somewhat unusual niche...because she is one of the few people who are comfortable with both observational data and with theory at a phenomenological level.”

Summary of Recommendation:

Professor Oey is a broad and original researcher, an enthusiastic teacher, and a generous contributor to the service needs in her department. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Sally Oey be promoted to the rank of associate professor of astronomy, 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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