

Fulvio Melia

Professor of Physics and Astronomy,
Associate Editor, The Astrophysical Journal Letters
Editor of the Series in Theoretical Astrophysics, The University of Chicago Press

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Education

1985 MIT, *Ph.D. Physics*.

1980 SUNY at Stony Brook, *M.A. Physics*.

1980 Melbourne University, *M.Sc. Physics* (Thesis).

1978 Melbourne University, *B.Sc. Physics* (Highest University Honors; ranked first in class).

(Selected) Honors and Awards

Erskine Fellow, University of Canterbury, New Zealand, 2007.

Professorial Fellow, School of Physics, Melbourne University, Australia 2005—present.

Galileo Circle Fellow, highest recognition awarded by the College of Science, University of Arizona 2005.

Year's Best Astronomy Book worldwide, *The Edge of Infinity*, Astronomy 2005 Special Issue.

Outstanding Book Award, *The Black Hole at the Center of Our Galaxy*, American Library Association 2004.

Series Editor for Theoretical Astrophysics, The University of Chicago Press, 2004—present.

Associate Editor, The Astrophysical Journal (Letters) 2002—present.

Fellow of the American Physical Society, 2002—present.

Miegunyah Fellow (Australia) for Distinguished Fundamental Researchers, 1999—2001.

Sir Thomas Lyle Fellow (Australia) for Distinguished International Visitors, 1998—1999.

Scientific Editor, The Astrophysical Journal, 1996—2002.

College of Science Distinguished Teaching Award, The University of Arizona, 1998.

Alfred P. Sloan Research Fellow (Physics), 1989—1992.

Presidential Young Investigator Award (Physics), 1988—1994.

Arthur H. Compton Fellow, Enrico Fermi Institute, University of Chicago, 1987.

Australian Commonwealth Post Graduate Research Award, 1979.

The Dixson Research Scholarship in Physics, 1979 (Dixson foundation, Australia, top Physics student).

Current Appointments

Professor, Department of Physics and Steward Observatory, University of Arizona, August 1994—present.
Series Editor for Theoretical Astrophysics, The University of Chicago Press, December 2004—present.
Associate Editor, The Astrophysical Journal (Letters) 2002—present.

Previous Appointments

Scientific Editor, The Astrophysical Journal, 1996—2002.
 Assoc. Professor, Dept. of Physics and Steward Observatory, University of Arizona, August 1991—1994.
 Assoc. Professor, Dept. of Physics and Astronomy, Northwestern University, August 1990—August 1991.
 Asst. Professor, Dept. of Physics and Astronomy, Northwestern University, September 1987—August 1990.
 Postdoctoral Fellow, The Enrico Fermi Institute, The University of Chicago, 1985—1987.
 Physics Instructor, Physics Department, MIT, January 1985—July 1985.
 Research Assistant, Physics Department, MIT, 1981—1984.
 Lecturer, Physics Department, MIT, 1980—1984.

Bibliography

Books (Excluding Edited Volumes)

- [8] *Cracking the Einstein Code* (popular science), Melia, Fulvio (Farrar, Straus, and Giroux, 2008)
- [7] *High-Energy Astrophysics* (textbook), Melia, Fulvio (Princeton University Press, 2007)
- [6] *The Galactic Supermassive Black Hole* (monograph), Melia, Fulvio (Princeton University Press, May 2007)
- [5] *Il Buco Nero al Centro della Nostra Galassia* (popular science), Melia, Fulvio (Bollati Boringhieri, August 2005)
- [4] *Na Skraju Nieskonczonosci* (popular science), Melia, Fulvio (Wydawnictwo Amber, October 2005)
- [3] *The Edge of Infinity: Supermassive Black Holes in the Universe* (popular science), Melia, Fulvio (Cambridge University Press, October 2003)
- [2] *The Black Hole at the Center of Our Galaxy* (popular science), Melia, Fulvio (Princeton University Press, April 2003)
- [1] *Electrodynamics* (textbook), Melia, Fulvio (The University of Chicago Press, September 2001)

Published In Refereed Journals

- [145] The Astrophysical Journal, submitted (2007):
The Cosmic Ray Distribution in Sagittarius B,
 Roland Crocker, David Jones, Ray Protheroe, Juergen Ott, Ron Ekers, Fulvio Melia, Todor Stanev,
 and Anne Green

- [144] The Astrophysical Journal (*Letters*), submitted (2007):
*General Relativistic Flux Modulations in Sgr A**,
Maurizio Falanga, Fulvio Melia, Michel Tagger, Andrea Goldwurm, and Guillaume Belanger
- [143] The Astrophysical Journal, submitted (2007):
An X-ray Period in the Supermassive Black Hole at the Galactic Center,
Fulvio Melia, Martin Prescher, Guillaume Belanger, and Andrea Goldwurm
- [142] The Astrophysical Journal (*Letters*), submitted (2007):
*Periodic Modulations in a Flare from Sagittarius A**,
G. Belanger, R. Terrier, O. de Jager, A. Goldwurm, and Fulvio Melia
- [141] The Astrophysical Journal, submitted (2007):
High-Energy Activity in the Unusually Soft TeV Source HESS J1804-216 toward Galactic Center,
Marco Fatuzzo, Fulvio Melia, and Roland M. Crocker
- [140] The Astrophysical Journal, submitted (2007):
MHD Simulations of Accretion onto Sgr A: Quiescent Fluctuations, Outbursts, and Quasi-periodicity*,
Chi-kwan Chan, Siming Liu, Chris L. Fryer, Dimitrios Psaltis, Feryal Ozel, Gabriel Rockefeller, and Fulvio Melia
- [139] The Astrophysical Journal (*Letters*), in press (2007):
*A Possible Link Between the Galactic Center HESS Source and Sgr A**,
David Ballantyne, Fulvio Melia, Siming Liu, and Roland Crocker
- [138] The Astrophysical Journal (*Letters*) **653**, 49L (2006):
Enhanced Cosmic Ray Flux and Ionization for Star Formation in Molecular Clouds Interacting With Supernova Remnants,
Marco Fatuzzo, Fred Adams, and Fulvio Melia
- [137] The Astrophysical Journal (*Letters*) **648**, 1020 (2006):
*A Testable Stochastic Acceleration Model for Flares in Sagittarius A**,
Siming Liu, Vahe Petrosian, Fulvio Melia, and Chris Fryer
- [136] The Astrophysical Journal **647**, 1099 (2006):
Stochastic Acceleration in the Galactic Center HESS Source,
Siming Liu, Fulvio Melia, Vahe Petrosian, and Marco Fatuzzo
- [135] The Astrophysical Journal **638**, 786 (2006):
The Sgr B2 X-ray Echo of the Supernova Explosion that Produced Sgr A East in the Galactic Center,
Christopher L. Fryer, Gabriel Rockefeller, Aimee Hungerford, and Fulvio Melia
- [134] The Astrophysical Journal **638**, 135 (2006):
Covariant Kinetic Theory with an Application to the Coma Cluster,
Brandon Wolfe and Fulvio Melia
- [133] The Astrophysical Journal **637**, 313 (2006):
Transrelativistic Synchrotron Emissivity, Cross-section, and Polarization,
Brandon Wolfe and Fulvio Melia
- [132] The Astrophysical Journal (*Letters*) **636**, L33 (2006):
*A Possible Rossby Wave Instability Origin for the Flares in Sagittarius A**,
Michel Tagger and Fulvio Melia
- [131] The Astrophysical Journal **636**, 798 (2006):
*Stochastic Electron Acceleration During the NIR and X-ray Flares in Sagittarius A**,
Siming Liu, Fulvio Melia, and Vahe Petrosian
- [130] The Astrophysical Journal **636**, 275 (2006):
A Persistent High-energy Flux from the Heart of the Milky Way: INTEGRAL's View of the GC,
G. Belanger, A. Goldwurm, M. Renaud, R. Terrier, F. Melia, N. Lund, J. Paul, G. Skinner, and F. Yusef-Zadeh