

# MICHAEL S. BRIGGS

## ADDRESS

The Center for Space Plasma and Aeronomic Research (CSPAR), Cramer Hall  
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## PROFESSIONAL PREPARATION

Princeton University, A.B. cum laude in Physics, 1982.  
University of California, San Diego, Ph.D. Physics, 1991.

## APPOINTMENTS

*University of Alabama in Huntsville:*  
*Center for Space Physics and Aeronomic Research (CSPAR):*  
Assistant Director CSPAR & Principal Research Scientist 2011–present  
Principal Research Scientist 2009–2011  
Research Scientist 1994–2009  
Adjunct Faculty, *Department of Space Science* 2015–present  
Adjunct Faculty, *Department of Physics* 2012–2014

## SCHOLARSHIPS, FELLOWSHIPS & AWARDS

NASA Exceptional Public Achievement Medal	2020
AAS HEAD Division Bruno Rossi Prize to the Fermi GBM Team	2018
UAH 2015 Researcher of the Year	2015
UAH Leadership Enhancement & Administrative Development (LEAD) Program	2014–2015
UAH Foundation Staff Awards	2003 & 2013
Center for Space Plasma & Aeronomic Research Scientific Achievement Award	2011
NASA Group Achievement Award: Fermi Science Team	2010
NASA Group Achievement Award: GLAST Burst Monitor Project Team	2008
NASA Compton Gamma-Ray Observatory Fellow	1991–1994
NASA Graduate Student Researcher's Program	1987–1990
UCSD Marlar Fellowship	1987–1988
University of California Regents' Fellowship	1982–1983
First place 37th Annual Science Talent Search	1978–1982

## INVITED TALKS

Ioffe Workshop on GRBs, St. Petersburg, Russia, 2019  
The Transient Universe, Singapore, 2018  
Fifth International Fermi Symposium, Japan, 2014.  
European Geosciences Union General Assembly, Vienna, 2014.  
Multi-Messenger Transient Astrophysics Workshop, KIAA, Peking University, 2013.  
Fermi Summer School, 2012 & 2016.  
Gamma Ray Bursts in the Era of Rapid Follow-up, Liverpool, UK, 2012.  
AGILE 10th Science Workshop, Frascati, Italy, 2012.  
Osaka University International Workshop on Lightning, Osaka, Japan, 2011.  
Gamma Ray Bursts 2010 Conference, Annapolis, 2010.  
Huntsville Workshop 2010 (Nashville): Partially Ionized Plasmas throughout the Cosmos.  
American Geophysical Union, San Francisco, 2009 & 2010.  
Fermi Symposium, Washington, D.C., 2009.

## SELECTED PUBLICATIONS

“*Fermi Observations of the LIGO Event GW170104*”, A. Goldstein, et al., *Ap. J. Lett.*, **846**, (2017),  
<https://iopscience.iop.org/article/10.3847/2041-8213/aa8319>

“*Terrestrial gamma ray flashes due to particle acceleration in tropical storm systems*”,  
O. J. Roberts, G. Fitzpatrick, G. Priftis, K. Bedka, T. Chronis, S. McBreen, M. S. Briggs, E. Cramer,  
B. Mailyan, M. Stanbro, *J. Geo. Res.*, doi:10.1002/2016JD025799, (2017),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2016JD025799>

“*The First Pulse of the Extremely Bright GRB 130427A: A Test Lab for Synchrotron Shocks*”,  
R. Preece, J. M. Burgess, A. von Kienlin, P. N. Bhat, M. S. Briggs, D. Byrne, V. Chaplin, et al.,  
*Science*, **343**: 6166, 51–54, doi:10.1126/science.1242302, (2014),  
<http://www.sciencemag.org/content/343/6166/51>

“*Time-Resolved Analysis of Fermi Gamma-Ray Bursts with Fast- and Slow-Cooled Synchrotron Photon Models*”,  
J. M. Burgess, R. D. Preece, V. Connaughton, M. S. Briggs, A. Goldstein, et al.,  
*ApJ*, **784**, 17, doi:10.1088/0004-637X/784/1/17, (2014),  
<http://iopscience.iop.org/0004-637X/784/1/17/>

“*The source altitude, electric current, and intrinsic brightness of terrestrial gamma-ray flashes*”,  
S. A. Cummer, M. S. Briggs, J. R. Dwyer, S. Xiong, V. Connaughton, G. J. Fishman, G. Lu, F. Lyu  
& R. Solanki, *Geo. Res. Lett.*, **41** 8586–8593, doi:10.1002/2014GL062196, (2014),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2014GL062196>

“*Terrestrial Gamma-ray Flashes in the Fermi Era: Improved Observations and Analysis Methods*”,  
M. S. Briggs, S. Xiong, V. Connaughton, D. Tierney, G. Fitzpatrick, et al., *J. Geo. Res.*, **118**, 6,  
3805, doi:10.1002/jgra.50205, (2013),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/jgra.50205>

“*Radio signals from electron beams in Terrestrial Gamma-ray Flashes*”, V. Connaughton,  
M. S. Briggs, S. Xiong, et al., *J. Geo. Res.*, **118**, 5, 2313, doi:10.1029/2012JA018288, (2013),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2012JA018288>

“*Fermi Detection of  $\gamma$ -ray Emission from the M2 Soft X-Ray Flare on 2010 June 12*”,  
M. Ackermann, M. Ajello, A. Allafort, W. B. Atwood, et al., *ApJ*, **745**, 144,  
doi:10.1088/0004-637X/745/2/144, (2012),  
<http://iopscience.iop.org/0004-637X/745/2/144>

“*Constraints on the Synchrotron Shock Model for the Fermi GBM Gamma-Ray Burst 090820A*”,  
J. M. Burgess, R. D. Preece, M. G. Baring, M. S. Briggs, V. Connaughton, S. Guiriec, et al., *Ap. J.*,  
**741**, 24, doi:10.1088/0004-637X/741/1/24, (2011),  
<http://iopscience.iop.org/0004-637X/741/1/24/>

“*Electron-positron beams from terrestrial lightning observed with Fermi GBM*”, M. S. Briggs,  
V. Connaughton, C. Wilson–Hodge, et al., *Geo. Res. Lett.*, **38**, L02808,  
doi:10.1029/2010GL046259, (2011),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2010GL046259>

“*First results on terrestrial gamma ray flashes from the Fermi Gamma-ray Burst Monitor*”,  
M. S. Briggs, G. J. Fishman, V. Connaughton, P. N. Bhat, W. S. Paciesas, et al., *J. Geo. Res.*, **115**,  
A07323, doi:10.1029/2009JA015242, (2010),  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2009JA015242>