

Curriculum Vitae of Jiong Qiu

ADDRESS

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EDUCATION

Doctor of Philosophy, Astrophysics July 1998
Department of Astronomy
Nanjing University, China

Bachelor of Science, Astronomy July 1993
Department of Astronomy
Nanjing University, China

APPOINTMENTS

Assistant, Associate, Full Professor, Department of Physics, Montana State University 2005 - present
Assistant Research Professor, Department of Physics, NJIT 2001 - 2004
Postdoctoral Research Associate, Big Bear Solar Observatory (California), NJIT 1998 - 2001

HONORS AND AWARDS

MSU Dean's Award for Meritorious Research and Creativity 2021
MSU Physics Outstanding Graduate&Undergrdaute Level Instructor 2021
MSU Physics Outstanding Graduate Level Instructor 2014
MSU Chamber of Commerce Award for Excellence (faculty mentor) 2012
National Science Foundation CAREER Award 2008
Solar Physics Division/American Astronomical Society Karen Harvey Prize 2007

RESEARCH AND ADVISING EXPERIENCE

Jiong Qiu's primary research interest focuses on understanding magnetic reconnection and energy release in solar eruptive events (flares and CMEs). She has made observational measurements of magnetic reconnection properties, and studied their relationship with the CME evolution, the structure of magnetic flux ropes, and heating rates of reconnection formed flare loops. She has also studied the evolution of solar active regions, small-scale active region heating events, dynamics of solar flare atmosphere, and Earthshine measurements of Earth's global atmosphere properties. In collaboration with students and colleagues, Jiong Qiu has published ~100 refereed articles in *Astrophysical Journal*, *Solar Physics*, *Journal of Geophysical Research* and so on. Graduate and/or undergraduate students are co-authors in about 30 of these papers.

PROFESSIONAL AFFILIATIONS

American Astronomical Society, Solar Physics Division	1998 - present
American Geophysical Union, Space Physics Division	1999 - present

SELECTED PUBLICATIONS

1. "Evolution of a streamer-blowout CME as observed by imagers on Parker Solar Probe and the Solar Terrestrial Relations Observatory", Liewer, P. C.; Qiu, J.; Vourlidas, A.; Hall, J. R. ; Penteado, P., *Astronomy and Astrophysics*, 650, A32 (2021)
2. "The Neupert Effect of Flare Ultraviolet and Soft X-Ray Emissions", Qiu, J., *Astrophysical Journal*, 909, 99 (2021)
3. "How Does Magnetic Reconnection Drive the Early-stage Evolution of Coronal Mass Ejections?", Zhu, C., Qiu, J., Liewer, P., Vourlidas, A., Spiegel, M., Hu, Q., *Astrophysical Journal*, 893, 141 (2020)
4. "Evolution of a Magnetic Flux Rope Toward Eruption", Wang W. S., Zhu, C. M, Qiu, J., et al. *Astrophysical Journal*, 871, 25 (2019)
5. "Coronal Holes and Open Magnetic Flux over Cycles 23 and 24", Lowder, C.; Qiu, J.; Leamon, R., *Solar Physics*, 292, 18 (2017)
6. "Elongation of Flare Ribbons", Qiu J., Longcope, D. W., Cassak P., Priest, E. R., *Astrophysical Journal*, 838, 17 (2017)
7. "Long Duration Flare Emission: Impulsive Heating or Gradual Heating?", Qiu, J., Longcope, D. W., *Astrophysical Journal*, 820, 14 (2016)
8. "Magnetic field line lengths inside interplanetary magnetic flux ropes", Hu, Q., Qiu, J., Krucker, S., *Journal of Geophysical Research: Space Physics*, 120, 5266 (2015)
9. "Structures of Interplanetary Magnetic Flux Ropes and Comparison with Their Solar Sources" Hu, Q., Qiu, J., Dasgupta, B., Khare, A., and Webb, G. M, *Astrophysical Journal*, 793, 53 (2014)
10. "Determining Heating Rates in Reconnection Formed Flare Loops of the M8.0 Flare on 2005 May 13", Liu, W., Qiu, J., Longcope, D. W., Caspi. A., *Astrophysical Journal*, 770, 111 (2013)
11. "Reconnection and Energetics in Two-ribbon Flares: a Revisit of the Bastille-Day Flare", Qiu, J., Liu, W-J., Hill, N., Kazachenko, M., *Astrophysical Journal*, 725, 319 (2010)
12. "Observational Analysis of Magnetic Reconnection Sequence, Qiu, J., *Astrophysical Journal*, 691, 1110 (2009)
13. "On the Magnetic Flux Budget in Low-corona Reconnection and Interplanetary Flux Ropes," Qiu, J., Hu, Q., Howard, T. A., Yurchyshyn, V. *Astrophysical Journal*, 659, 758 (2007)
14. "Magnetic Reconnection and Mass Acceleration in Flare-Coronal Mass Ejection Events", Qiu, J., Wang, H., Cheng, C. Z., Gary, D. E. 2004, *Astrophysical Journal*, 604, 900 (2004)
15. "Earthshine and the Earth's albedo: 1. Earthshine observations and measurements of the lunar phase function for accurate measurements of the Earth's Bond albedo", Qiu, J. ; Goode, P. R. ; Palle, E. ; Yurchyshyn, V. ; Hickey, J. ; Montanes Rodriguez, P.; Chu, M. -C. ; Kolbe, E. ; Brown, C. T. ; Koonin, S. E., *Journal of Geophysical Research*, 108, D22, 4709 (2003)