






Jee Woo Park

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Academic Employment	Assistant Professor, Pohang University of Science and Technology 2020 - Atomic, Molecular, and Optical (AMO) physics Ultracold gases of atoms and molecules
	Postdoctoral Fellow, Seoul National University 2016 - 2020 Quantum Gases Laboratory of Prof. Yong-il Shin Strongly interacting atomic Fermi gases (part of the compulsory military service in Korea)
Education	Ph.D. in Physics, Massachusetts Institute of Technology 2009 - 2016 Dissertation Title: "An Ultracold Gas of Dipolar Fermionic $^{23}\text{Na}^{40}\text{K}$ Molecules" Advisor: Martin W. Zwierlein
	A.B., Harvard University 2005 - 2009 <i>Magna Cum Laude</i> with highest honors in Physics and Mathematics
Awards	Korean Physical Society Atomic, Molecular Physics Award 2022
	Chung-Ahm POSCO Science Fellowship 2018 - 2020
	Kwanjeong Educational Foundation Fellowship 2009 - 2013
	MIT Physics Department Thomas Frank Fellowship 2009 - 2010
	Korea Presidential Scholarship for Students in Science 2005 - 2009
	Harvard Herchel Smith Fellowship 2007
Research Highlights	"Kibble-Zurek universality in a strongly interacting Fermi superfluid" <i>Nature Physics</i> 15, 1227 (2019) First demonstration of the Kibble-Zurek mechanism in a strongly correlated many-body system
	"Second-Scale Nuclear Spin Coherence Time of Trapped Ultracold $^{23}\text{Na}^{40}\text{K}$ Molecules" <i>Science</i> 357, 372 (2017) Realization of robust storage qubits for quantum information science in the nuclear spins of ultracold molecules; Featured on Science , "Extending the coherence time of molecules," and reported on MIT News
	"Ultracold Dipolar Gas of Fermionic $^{23}\text{Na}^{40}\text{K}$ Molecules in their Absolute Ground State" <i>Phys. Rev. Lett.</i> 114 , 205302 (2015) First creation of chemically stable, ultracold gas of dipolar fermionic molecules; Selected as PRL Editors' Suggestion , featured on APS Physics Viewpoint and MIT News

Publications

11. Z. Z. Yan, **J. W. Park**, Y. Ni, H. Loh, S. Will, T. Karman, and M. W. Zwierlein, “Resonant dipolar collisions of ultracold molecules induced by microwave dressing” *Phys. Rev. Lett.* **125**, 063401 (2020)
10. B. Ko, **J. W. Park***, and Y. Shin*, “Kibble-Zurek universality in a strongly interacting Fermi superfluid” *Nat. Phys.* **15**, 1227 (2019)
(*corresponding authors)
9. **J. W. Park**, B. Ko, and Y. Shin, “Critical Vortex Shedding in a Strongly Interacting Fermionic Superfluid” *Phys. Rev. Lett.* **121**, 225301 (2018)
8. **J. W. Park**, Z. Z. Yan, H. Loh, S. Will, and M. W. Zwierlein, “Second-Scale Nuclear Spin Coherence Time of Trapped Ultracold $^{23}\text{Na}^{40}\text{K}$ Molecules” *Science* **357**, 372 (2017)
7. S. Will, **J. W. Park**, Z. Z. Yan, H. Loh, and M. W. Zwierlein, “Coherent Microwave Control of Ultracold $^{23}\text{Na}^{40}\text{K}$ ” *Phys. Rev. Lett.* **116**, 225306 (2016)
 
6. **J. W. Park**, S. Will, and M. W. Zwierlein, “Ultracold Dipolar Gas of Fermionic $^{23}\text{Na}^{40}\text{K}$ Molecules in their Absolute Ground State” *Phys. Rev. Lett.* **114**, 205302 (2015)
 
5. **J. W. Park**, S. Will, and M. W. Zwierlein, “Two-Photon Pathway to Ultracold Ground State Molecules of $^{23}\text{Na}^{40}\text{K}$ ” *New J. Phys.* **17**, 085002 (2015)
4. C.-H. Wu, **J. W. Park**, P. Ahmadi, S. Will, and M. W. Zwierlein, “Ultracold fermionic Feshbach molecules of $^{23}\text{Na}^{40}\text{K}$ ” *Phys. Rev. Lett.* **109**, 085301 (2012) 
3. **J. W. Park**, C.-H. Wu, I. Santiago, T. G. Tiecke, S. Will, P. Ahmadi, and M. W. Zwierlein, “Quantum degenerate Bose-Fermi mixture of chemically different atomic species with widely tunable interactions” *Phys. Rev. A* **85**, 051602 (2012)
2. C.-H. Wu, I. Santiago, **J. W. Park**, P. Ahmadi, M. W. Zwierlein, “Strongly interacting isotopic Bose-Fermi mixture immersed in a Fermi sea” *Phys. Rev. A* **84**, 011601 (2011)
1. K. Heo, **J. W. Park**, J.-E. Yang, J. Koh, J.-H. Kwon, Y. M. Jhon, M. Kim, M.-H. Jo, and S. Hong “Large scale assembly of highly flexible low-noise devices based on silicon nanowires” *Nanotechnology* **21**, 145302 (2010)