

# Yuichi Ohnuma

## Position

Postdoctoral Scholar

## Education

Ph.D. in Physics, Tohoku University, Japan      2011.04 - 2016.03  
B.S. in Physics, Tohoku University, Japan      2007.04 - 2011.03

## Professional Experience

Postdoctoral Fellow, Advanced Science Research Center, Japan Atomic Energy Agency, 2016.04–2018.03

Postdoctoral Fellow, Kavli Institute for Theoretical Sciences, University of Chinese Academy of Sciences, 2018.04–present

## Research Activities

- Spin Seebeck and spin Peltier effects
- Spin pumping and modulation of FMR linewidth
- Spin current noise
- Spin Hall effect
- Spin transport with spin vorticity coupling

## Publications

M. Mamoru, Y. Ohnuma, T. Kato, and S. Maekawa  
“Spin Current Noise of the Spin Seebeck Effect and Spin Pumping”  
Physical Review Letters **120**, 037201 (2018).

Y. Ohnuma, M. Mamoru, and S. Maekawa  
“Theory of the spin Peltier effect”  
Physical Review B **96**, 134412 (2017).

M. Mamoru, Y. Ohnuma, and S. Maekawa  
“Theory of spin hydrodynamic generation”  
Physical Review B **96**, 020401(R) (2017).

Y. Ohnuma, M. Mamoru, and S. Maekawa  
“Spin transport in half-metallic ferromagnets”  
Physical Review B **94**, 184405 (2016).

S. Geprägs, A. Kehlberger, F. D. Coletta, Z. Qiu, E.-J. Guo, T. Schulz, C. Mix, S. Meyer, A. Kamra, M. Althammer, H. Huebl, G. Jakob, Y. Ohnuma, H. Adachi, J. Barker, S. Maekawa, G. E. W. Bauer, E. Saitoh, R. Gross, S. T. B. Goennenwein, and M. Kläui  
“Origin of the spin Seebeck effect in compensated ferrimagnets”  
Nature Communications **7**, 10452 (2016).

Y. Ohnuma, H. Adachi, E. Saitoh, and S. Maekawa

“Magnon instability driven by heat current in magnetic bilayers”  
Physical Review B **92**, 224404 (2015).

Y. Ohnuma, H. Adachi, E. Saitoh, and S. Maekawa  
“Enhanced dc spin pumping into a fluctuating ferromagnet near  $T_c$ ”  
Physical Review B **89**, 174417 (2014).

Y. Ohnuma, H. Adachi, E. Saitoh, and S. Maekawa  
“Spin Seebeck effect in antiferromagnets and compensated ferrimagnets”  
Physical Review B **87**, 014423 (2013).

## Contact

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