

## 2015年度 物理学科大輪講 第4回

日時：11月11日(水)13時30分から

場所：南3号館301教室

時間：25分(発表20分、討論5分)

前半(13:30-15:10)

座長：平野

1. 12-041-062 (荒川研究室) 13:30-13:55  
Fast self-compensating ellipsometer  
H. J. Mathieu, D. E. McClure, and R. H. Muller  
Review of Scientific Instruments, vol. 45, p. 798 (1974)
2. 12-041-049 (荒川研究室) 13:55-14:20  
Infrared intensity in small ammonia and water clusters  
Mikhail N. Slipchenko, Kirill E. Kuyanov, Boris G. Sartakov and Andrey F. Vilesov  
J. Chem. Phys. 124, 241101 (2006).
3. 12-041-012 (荒川研究室) 14:20-14:45  
SPECTROSCOPIC EFFECTS IN CH<sub>4</sub>/H<sub>2</sub>O ICES  
Óscar Gálvez<sup>1</sup>, Belén Maté, Víctor J. Herrero, and Rafael Escribano  
The Astrophysical Journal, 703:2101-2107, 2009 October 1
4. 12-041-021 (荒川研究室) 14:45-15:10  
Formation of methanol from methane and water in an electrical discharge  
Michael P. Pearce, Madeleine J. Bussemaker, Paul D. Cooper, Kim M. Lapere,  
Duncan A. Wild and Allan J. McKinley  
Phys. Chem. Chem. Phys. 14(2012)3444-3449

後半 ( 15:20–17:00 )

座長：宇田川

5. 12-041-052 ( 平野研究室 ) 15:20–15:45  
Observation of Persistent Flow of a Bose-Einstein Condensate in a Toroidal Trap  
C. Ryu, M. F. Andersen, P. Cladé, Vasant Natarajan, K. Helmerson, and W. D. Phillips  
Physical Review Letters, vol. 99, p. 260401 (2007)
  
6. 12-041-032 ( 平野研究室 ) 15:45–16:10  
Sub-Shot-Noise Correlation of Total Photon Number Using Macroscopic Twin Pulses of Light  
D. T. Smithey, M. Beck, M. Belsley, and M. G. Raymer  
Physical Review Letters 69, 2650 (1992)
  
7. 12-041-041 ( 渡邊研究室 ) 16:10–16:35  
A THEORY FOR THE ESTIMATION OF SURFACE AND INTERFACIAL ENERGIES I. DERIVATION AND APPLICATION TO INTERFACIAL TENSION  
L.A.Girifalco and R.J.Good  
The Journal of Physical Chemistry, Vol.61, p.904-909 (1957)
  
8. 12-041-065 ( 渡邊研究室 ) 16:35–17:00  
Accurate determination of the Gibbs energy of CuZr melts using the thermodynamic integration method in Monte Carlo simulations  
J.-P. Harvey, A. E. Gheribi, and P. Chartrand  
J. Chem. Phys. 135, 084502 (2011)