

## 2015年度 物理学科大輪講 第3回

日時：10月28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：渡邊

1. 12-041-039 (理論研究室) 13:30-13:55  
Integration of Ordinary Differential Equations  
William H.Press,Saul A.Teukolsky,William T.Vetterling,Brian P.Flannery  
Numerical Recipes in C,(Software,1988-2002)Chapter16,p.707
2. 12-041-057 (理論研究室) 13:55-14:20  
SUPERCONDUCTIVITY OF METALS AND ALLOYS  
Chapter4 Description of the condensed state  
Chapter5 The self-consistent field method  
P.G.De Gennes  
W.A.BENJAMIN,INC.NEW YORK AMSTELDAM(1966) Chapter4 p.93 and Chapter5 p.137
3. 12-041-070 (平野研究室) 14:20-14:45  
Air-to-ground quantum communication  
Sebastian Nauerth, Florian Moll, Markus Rau, Christian Fuchs, Joachim Horwath,  
Stefan Frick and Harald Weinfuter  
Nature Photonics, vol.7, 382-386 (2013)
4. 12-041-013 (平野研究室) 14:45-15:10  
Practical quantum key distribution protocol without monitoring signal disturbance  
Toshihiko Sasaki, Yoshihisa Yamamoto & Masato Koashi  
Nature, vol.509, p.475, (2014)

後半 ( 15:20–17:00 )

座長：井田

5. 12-041-031 ( 高橋研究室 ) 15:20–15:45

Magnetic Interaction of Nuclei with Electrons

C.P.Slichter

Principles of Magnetic Resonance, Springer-Verlag, P.87 ~ 104

6. 12-041-040 ( 高橋研究室 ) 15:45–16:10

Magnetic and Thermal Properties of  $\lambda$ -(BETS)<sub>2</sub>FeCl<sub>4</sub> System

Hiroshi Akiba, Kento Nobori, Kazuo Shimada, Yutaka Nishio, Koji Kajita, Biao Zhou, Akiko Kobayashi, and Hayao Kobayashi

Journal of the physical Society of Japan 80(2011)063601

7. 12-041-029 ( 渡邊研究室 ) 16:10–16:35

Volume Expansion Measurements in Metallic Liquids and Their Relation to Fragility and Glass Forming Ability: An Energy Landscape Interpretation

J.C.Bendert, A.K.Gangopadhyay, N.A.Mauro, and K.F.Kelton

PHYSICAL REVIEW LETTERS, vol.109, p.185901 (2012)

8. 12-041-056 ( 渡邊研究室 ) 16:35–17:00

Discovery of a metastable Al<sub>20</sub>Sm<sub>4</sub> phase

Z.Ye, F.Zhang, M.I.Mendeleev, R.T.Ott, E.Park, M.F.Besser,

M.J.Kramer, Z.Ding, C.-Z.Wang, K.-M.Ho

Applied Physics Letters, 106, 101903 (2015)