

Okayama University
Faculty of Science

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Okayama, October 9, 2018

Exercises for Advanced Physics 2, 2018 term 3

Exercise Set 1

(Due date: Tuesday, October 16, 2018)

Exercise 1 (Magnetic devices in everyday life) (5 points)

Please describe three devices where magnetism is used. Include at least one for which it is important to understand the microscopic origin of magnetism. Explain. (At least 100 words).

Exercise 2 (Not so free electrons) (5 points)

Explain in your own words why in a ferromagnetic material like magnetite, there are constraints on the movement of electrons. (At least 100 words).