

(For JSPS Fellow)

Form B-5

Date (日付)

03/06/2017 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Daeil Park (ID No. P15378)- Participating school (学校名): Kariya High School, Aichi- Date (実施日時): 07/02/2017 (Date/Month/Year: 日/月/年)- Lecture title (講演題目): (in English) Thermal design of spacecraft(in Japanese) 宇宙線の熱設計

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

In spacecraft design, the function of the thermal control system is to keep all the spacecraft's component systems within acceptable temperature ranges during all mission phases. It must cope with the external environment, which can vary in a wide range as the spacecraft is exposed to deep space or to solar or planetary flux, and with ejecting to space the internal heat generated by the operation of the spacecraft itself.

Thermal control is essential to guarantee the optimum performance and success of the mission because if a component is subjected to temperatures which are too high or too low, it could be damaged or its performance could be severely affected. Thermal control is also necessary to keep specific components (such as optical sensors, atomic clocks, etc.) within a specified temperature stability requirement, to ensure that they perform as efficiently as possible.

- Language used (使用言語): English/Japanese

- Lecture format (講演形式):

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 60 min (分)

◆Lecture style(ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Used projector

◆Interpretation(ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

Provided Japanese explanation by myself

◆Name and title of accompanied person (同行者 職・氏名)

◆Other note worthy information (その他特筆すべき事項):

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):