

**Form B-2
(FY2021)**

Date (日付)

26/05/2021

(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) : Sven Möller (ID No. P20018)

- Name and title of the accompanying person (講義補助者の職・氏名)

杉本祥馬 (Ph.D. student)- Participating school (学校名) : Fukui Prefectural Wakasa High School- Date (実施日時) : 26/05/2021 (Date/Month/Year:日/月/年)

- Lecture title (講義題目) :

Symmetries and groups

- Lecture format (講義形式) :

 Onsite ・ Online (Please choose one.) (対面 ・ オンライン) ((どちらか選択ください。)) Lecture time (講義時間) 60 min (分), Q&A time (質疑応答時間) 15 min (分) Lecture style (ex.: used projector, conducted experiments)

(講義方法 (例: プロジェクター使用による講義、実験・実習の有無など))

Projector, class experiments, class discussions

- Lecture summary (講義概要) : Please summarize your lecture within 200-500 words.

The first half of the talk I talked about myself (as a person but also academically) and about my country of origin (Germany). I talked about my personal interests and how I became a scientist. I also made a small quiz about similarities and differences between Japan and Germany. Finally, we talked about German food.

The second half of the talk I introduced the mathematical concept of *groups* by means of easy examples of symmetry groups. First, I explained where symmetries can be found in nature. Then, I let the students experiment with the symmetries of a unilateral triangle and discover the "group structure". Finally, I gave a mathematical rigorous definition of a group and explained how this appears in my research.

 Other noteworthy information (その他特筆すべき事項) : n/a

- Impressions and comments from the accompanying person (講義補助者の方から、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。) :

SD

□弊会記入欄

本事業に対して特に強い意見はございませんが、強いて言うなら、もう少し長く交流の時間を取った方が高校の生徒達にとって良いのではと思いました。