## October 2020

## #8

## JSPS Science Dialogue for International English Course (2020.10.21)

The first presentation by a visiting lecture at school gym was held on October 21st for the students in the International English Department. Dr. Gijs VAN DER LUBBE (Netherlands) from Okinawa International University Graduate School of Regional Culture shared his research on humanities / literature, linguistics and related fields He is currently conducting research on the description and inheritance of crisis languages in the Ryukyu archipelago. He presented his findings on that

theme.

According him, the languages traditionally spoken in the Ryukyu Islands (such as Uchina-guchi) are endangered languages, and the number of people who can speak is decreasing. While comparing this to the situation of Japanese and other languages around the world, he created a fun and engaging lecture by using familiar dialect and activities for the students.









# 9
Lecture and Experiment by OIST (2020.10.30)

A visiting lecture was held on October 30 for the 1st and 2nd grade students Dr. Johannes Schoenke (Germany) from Okinawa Institute of Science and Technology Graduate University (OIST) of Mathematical Mechanics and Materials Science Unit shared his research. The theme of the lecture was "Möbius Tables and Kaleidocycles: New Ideas for Furniture and Mechanical Linkages" He is currently conducting research in geometry and mechanics and is involved in the theory, design,

construction, and computer visualization of mechanical systems. This includes research on mechanisms and linkages (simple examples are gears or scissor lifts) and the question of how objects can be connected through hinges to transmit forces and movement. He presented his findings on that theme. He created a fun and engaging lecture including activities for the students such as making a Möbius Tables and Kaleidocycles from only paper.













# 10 Interim Report for SSH Science and Mathematics Research II 2nd Upload List Committee (2020.10.21. Wed)

Students made and presented posters summarizing the results of their ongoing research based on the guidance from experts at the University of the Ryukyus and supporting high school teachers. The Steering Committee said, "Despite the current pandemics, the research

exceeded expectations, and there was very little to criticize. It's good to have the know-how passed down from seniors to juniors. We also encourage them to make us of the facilities at the University of the Ryukyus."





## Kyuyo SSH course Physics, Chemistry, Biology, Geology and Mathematics (2020.10.8-27)

On October 8, 12, 14, 23, and 27, we conducted five days of Kyuyo SSH courses in physics, chemistry, biology, geology, and mathematics. Because of the corona disaster this year, all the courses were held online. In the field of physics, Associate Professor Masahiro Maeno (Faculty of Science, University of the Ryukyus) gave a lecture titled "Let's understand the theory of relativity with web applications", in the field of chemistry, Professor Toshiaki Teruya (Faculty of Education, University of the Ryukyus) gave a lecture titled "Let's find research themes from familiar phenomena", and in the field of biology, Professor Koji Sugio (Graduate School of Education, University of the Ryukyus) gave a lecture titled "Survival strategy of organisms - In the field of geology, Professor Masahide Furukawa (Faculty of Science, University of the Ryukyus) presented "Frontiers of Earth Science Research: Geology and Tectonics of the Ryukyu Arc", and in the field of mathematics, Associate Professor Koichi Yamashiro (Faculty of Education, University of the Ryukyus) presented "The Fibonacci Rabbit". . All the courses were very good opportunities to learn not only about specialized topics, but also about the research in each field and how it will be developed. Although the participants were mainly first-year high school students, they took several courses, and some of them were from Kyuyo Junior High School, which showed the high level of interest in science among the students of Kyuyo. We hope that the first year high school students will use these lectures as a starting point for their future research projects.





