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（For JSPS Fellow）

Form B-5

Date（日付）
22/12/2016 （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）: SARA TURRIZIANI （ID No. P16737 ）

- Participating school（学校名）: Nagoya City Koyo Senior High School

- Date （実施日時）: 2016/12/16 （Date/Month/Year:日/月/年）

- Lecture title（講演題目）: （in English） Being an astronomer in the Modern World

（in Japanese）

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

I started my lecture showing images of Japan and Italy, my home country, as seen from space. Then, I spoke a little bit about the connection between Italy and Japan as this year marks the 150th Anniversary of Diplomatic Relations between the two countries, and I gave some information regarding geography, nature, food and history of Italy; I made also a comparison between my home town and Nagoya. Then I told why, when and how I decided to pursue my career in science, studying astronomy and physics. This anecdote served as an introduction to the part of the lecture dedicated to science. I started this part explaining them that astronomy is the study of light (radiation) coming from outer space: I presented the electromagnetic spectrum, and I showed some astronomical images in order to let the students understand how familiar objects like the Sun and the Moon look really different if we observe them with instruments sensible to radiation that is not visible to our eyes. Then I explained the tools which astronomers actually use to study light (namely, telescopes and detectors), and I gave some practical examples on how technological advances in astronomy impact on everyday life. The main part of the lecture was focused then on black holes: what they are, how the matter moves nearby a black hole, and how we can study all these topics. To help the students to visualize better the concepts I was presenting, I used a scarf to simulate the motion of matter nearby a black hole. Then I showed some videos of observations made with radio telescopes of jets generated by supermassive black holes located at the center of galaxies. After that, I talked about the project I am working on in Japan as a JSPS fellow, i.e. a new kind of detector, and I showed them a video with a typical working session in the lab, showing me making an experiment with a camera.

I closed the lecture showing the famous ”pale blue dot” image recorded by Voyager 1 spacecraft to let the students aware of how tiny is our planet in the vastness of the Universe.

- Language used（使用言語）: English

Must be typed

- Lecture format（講演形式）:

◆Lecture time（講演時間） 60 min（分）, Q&A time（質疑応答時間） 10 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 to show PowerPoint slides with embedded videos

◆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））

Not applicable

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

Not applicable

◆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。）: Not applicable