

滞在型研究員報告書

Activity Report for the NAOJ Visiting Fellows Program

所 属 (Institution)	Beijing Normal University
氏 名 (Name)	Yuefan Guo
研究課題名 (Research subject)	Squeezed light experiment
滞在期間 (Period of stay)	<div style="display: flex; justify-content: space-around;"> 年 月 日 年 月 日 </div> <div style="display: flex; justify-content: space-around;"> 2016 01 15 2016 02 27 </div>
受入責任者氏名 (NAOJ host researcher)	Raffaele Flaminio

<p>1. 滞在型研究員として国立天文台滞在中に行った活動について簡単にお書きください。 (Summarize your activities during the stay using the NAOJ Visiting Fellows Program.)</p> <p>My activity has been carried out in the contest of the project for producing frequency-dependent squeezing to prepare the future upgrade of KAGRA.</p> <p>I have worked mainly on the experiment of squeezed light, this time my work can be divided into two parts, the first part is the test of the laser which will be used in the squeezed light experiment, the second part is mounting some components onto the optical table according to the optical scheme designed by others.</p>
<p>2. 今回滞在型研究員として得られた成果について簡単にお書きください。 (Summarize your research products from the stay.)</p> <p>The first part of my work here, testing the properties of the laser, the first property we got is the correspondence between the laser output power and the current of the diode inside the laser, the second is the position and the size of the beam waist. The second part start with the test of transmission rate of the Faraday Isolator and the phase modulator. Then start to mount the beginning part of the optical scheme, with some frustration, we re-calculate and redesign the optical scheme. The goal we want to get this time is to get the green light from the SHG crystal. And on my last weekday here, we got what we wanted.</p> <p>I also participate the KAGRA face to face meeting in Kashiwa campus of University of Tokyo.</p>

様式 2 (Form 2)

3. この制度について何か御意見がありましたら、お書きください。

(Please provide any comments about this program.)

This is my first time in GWPO of NAOJ with the Visiting Fellows Program, I really can feel the consideration from every part of my study and life here. It is really a great opportunity to be part of the program. It gives me a lot of impressive experience.