## Dr. TAIRA Yoshitaka

## Could you tell me about your research?

My research is focused on developing gamma-ray sources that carry orbital angular momentum. Through research in a variety of solid states, nuclear and particle physics fields, I am working to create applications for new gamma-ray sources. My current goal is to develop high-power lasers that carry orbital angular momentum and to elucidate yet-undefined properties of the orbital angular momentum and the spatial distribution of gamma-rays.

Could you give me some advice on preparing to go abroad?

You should first renew your passport if it is close to expiring. Then, ask your host institution to prepare a Form DS-2019 (Certificate of Eligibility for Exchange Visitor Status) for you. This took the longest time in my visa application process—about two months. After receiving this form, you may apply for your visa (J1 status). Application can be made using the American Embassy's homepage. As the application guidelines and all the required documents are posted on the page, your application submittal should go smoothly. However, there are many required documents and much information that you must fill out. A photo meeting certain specifications is also required. I had no problem taking a picture of myself and adjusting its size to specification using photo-editing software. Opening a bank account is another area of preparation. You may want to transfer money from your Japanese bank account to an account that you will open after arriving in the host country. My bank in Japan requires us to submit an application form before departing Japan when we will use net banking as an overseas resident. If you already have a bank account in the host country or you will open one upon arrival, JSPS will transfer your first stipend directly into it if you request them to.

Could you give me some advice on problems that may arise while living abroad?

In America, people can own guns. There are frequent shooting incidents. One happened about five minutes from where I live. I take various precautions to stay as safe as possible, including not going out after dark. Ultimately, all I can do is pray that I will not become ensnared in such an incident. Another area of concern is the cost of medical care. One must first pay for treatment out of pocket. (There are, however, some hospitals in large cities to which insurance companies will make direct payments; no such hospitals exist in smaller towns.) I feel anxious about what to do if I should get sick or injured in way that involves a medical bill so big that I can't pay it. Here too, all I can do is pray that it doesn't happen. Many traveller insurance or inexpensive insurance policies offered by local universities do not cover childbirth or pregnancy examinations. If a researcher or accompanying spouse is expected to become pregnant or give birth while overseas, it would be a good idea to consult with the host university beforehand. Regarding a social security number, J1 visa holders can acquire one, but must apply 10 days after arriving in the US.

## What is it like living abroad?

With regard to housing, American rentals are more convenient than in Japan. They usually come equipped with a washing machine and dryer, refrigerator, electric range, dishwasher, and air conditioner. Where I live in Newport News, Virginia, rents run from about \$1,000 to \$1,200 per month. As Japanese companies have branch offices in the area and there is a sizable population American military dependents of Japanese descent, several supermarkets carry Japanese food. However, it costs about twice as much as buying it in Japan. Not just Japanese food but the price of commodities in general seems higher than in Japan.

What was good about your receiving an Overseas Research Fellowship?

In a word, I must say that I am very thankful for this fellowship. As I am not "employed" at my host institution in the US, I am not required to perform any routine tasks or duties. This frees me up to concentrate on my research, which I go about pursuing with a sense of gratitude. After coming to America, I realized that I should have gone abroad at an even earlier age. After finishing an Overseas Research Fellowship, one has an expanded range of career paths from which to choose from.