


Session 9

Astronomy outreach for hospitalized children at Kyoto University Hospital

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Abstract. Department of Astronomy, Kyoto University has been conducting astronomy outreach programs in Kyoto University Hospital since 2006. In this proceeding, we report our activities in the hospital, survey results from graduate students, and discuss future directions.

1. Organizing team and objective

This program has been carried out by the graduated students of Department of Astronomy, Kyoto University, under the supervision of Prof. Mineshige and Mr. Arimoto. This is also a part of the activities of “Nico-Nico Tomato” †, volunteer group acting in the pediatrics department, Kyoto University Hospital, and collaborating with the “Ohka-do” ‡, astronomical volunteer team based in Kyoto.

The purpose of our activity and Nico-Nico Tomato is to provide a “fun and joy” moment to children even in the hospital, where is the place for medical treatments. Most of the participating children in this activity need long-term treatment and should obey strict restrictions; e.g., they are not allowed to go out. Therefore, they have really few chances to look up night skies. Our events offers opportunities for such children to feel and enjoy the starry sky and universe even in the hospital and to stimulate their curiosity. Also from the perspective of inclusive astronomy, since some of these children are hard to go to public museums or planetariums, our activity is a few of their chances to enjoy Astronomy.

2. Our activity

We hold our events roughly every three months at the hospital. Our activity is divided into two parts, the afternoon and evening session. In the afternoon session, we have storytelling and quizzes related to astronomy and space (left panel of Figure 1). We often select the seasonal astronomical events as the theme, so that they can feel the change of the seasons and enjoy the real sky more if they had chance to look up night sky. The evening session, which starts from around 6pm, is held at an open space in the hospital. In this space, there is a large window so that we can see moons and stars even from

† Facebook page of Nico-Nico Tomato in Japanese: <https://www.facebook.com/nicotomakyoto>
‡ website of Ohkado in Japanese: <http://www.oukado.org/>



Figure 1. Scenes of our activities in Kyoto University Hospital. Left: storytelling in the afternoon session. The theme of this talk was about moon at this time, as this was in autumn and a time for moon watching. Right: gazing the moon and stars from inside the hospital.

inside of the building. With small telescopes, we mainly watch the moon and sometimes the planets (right panel of Figure 1). Another popular content for the evening session is universe travel using MITAKA, which is a universe-visualizing software developed by NAOJ §.

3. Benefit and take away for participated graduate students

Until now, over 30 graduate students have participated in this activity. From the standpoint of graduate students, this is more than a normal outreach event of astronomy; this program is a good chance to learn and understand inclusive astronomy and socially vulnerable people through interacting with hospitalized children. Each student needs to attend a mini-lecture by our supervisor Mineshige beforehand to learn what to beware of for our activity with hospitalized children, so as to avoid any inappropriate actions, even though they are unintentional, from the viewpoints both of medical care and protection of privacy.

We conducted a survey to the participated graduate students. All they answered that they are satisfied with the activity, mainly because they are happy to join the outreach program and to see the smile faces of children. One suggestion for the future is that we should refresh some part of our contents, which are less attractive to children.

4. Future direction

Today, all voluntary activities in Kyoto University Hospital including ours are limited since March 2020 due to COVID-19. The play room, where the children can play with toys and where Nico-Nico Tomato performs its activities, is closed as well. To develop something kids can enjoy in their own rooms and to keep our member active, we create a mobile craft kit, which is shaped as our solar system. As nobody knows when we can re-enter the hospital for our activity, we will keep small activities to pass on our knowledge and experiences to our younger students.

Acknowledgement

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§ MITAKA can be downloaded from https://4d2u.nao.ac.jp/html/program/mitaka/index_E.html