

Session: [B3C-3] S7 : Historical Astronomy, Astronomy Education and Public Outreach

Date: August 20, 2014 (Wednesday)

Time: 16:00~17:30

Room: Room C (Room 104)

Chair: Hidehiko Agata (National Astronomical Observatory of Japan)

[B3C-3-1]

16:00~16:15

[Invited] Conduction of Astronomical Activities to Motivate Students in Public Schools of Nepal

Sarita Baral (Takshashila Academy, Nepal)

Despite the favorable climatic and geographical conditions, research and development of the astronomy in Nepal is very limited. Nepal has to do lots of works to aware the astronomy for its development. To increase the astronomical awareness there should be activities in School. School activities will aware not only to children but also to the school teachers in a practical way. If the school children are interested in astronomy they continue their study in astronomy. They conduct research and development in this field. Hence It has been believed that school education is very important to make foundation in the development of astronomy. In this regard, the curriculum of science of the class 8, 9 and 10 has been thoroughly reviewed and the teaching methodology has been inquired. Considering the gaps of teaching at class and the practical works of Astronomy, practical ways and materials such as fundamental of telescope and its use, measures and precautions to view the astronomical objects in normal days or in astronomical events such as eclipse, transits has been considered in the project. Posters, pamphlets, astronomy books, Small telescope, solar glasses are used and distributed to the selected four public schools of Nepal.

[B3C-3-2]

16:15~16:30

[Invited] Current Status of Astronomical Educational Observatories Activities in Uzbekistan

Ehgamberdiev Sh. (Ulugh Beg Astronomical Institute of the Uzbek Academy of Sciences, Uzbekistan), Asfandiyarov I., Baijumanov A., and Tillaev Yu.

It is difficult to imagine a modern university or college lack of observatory for the reason that astronomy is not only an academic science, but also the main factor in building world view of a human being. The Ulugh Beg Astronomical Institute put forward initiative to build in Uzbekistan the network of educational observatories equipped with professional class telescopes. There are five educational observatories at this moment which are fully operational and one more observatory is going to be built by the end of 2014 in Nukus, Karakalpakstan (Aral see area).

The network will provide all universities and pedagogical institutes where astronomy is taught with telescopes adjusted for educational purposes to have practical courses on observational astronomy.

Geographical location of Uzbekistan and its astroclimate quality make it unique place for astronomical programs requiring continuous (without day and night interruptions) observations of celestial objects. Due to spread of the country in longitudinal direction atmospheric front crosses it in about 2 days. The location of observatories around the country is ideal for performing uninterrupted for weather conditions astronomical observations.

After equipping with CCD-cameras in near future the network will be feasible to join campaigns on follow up observation of space mission targets. It is also significantly improve education in the institutions where observatories were opened.

[B3C-3-3]

16:30~16:45

[Invited] Chinese Ancient Poetry Astrophotography Competition

Bing Li (Beijing Planetarium, China)

Our ancestors are closer to the night sky than we are. The sky nearly never changes. The OAD 2013 project Chinese Ancient Poetry Astrophotography Competition encourages more people to take pictures of the night sky according to Chinese ancient poems. And then let more people appreciate the night sky through the lenses of that beautiful poetry! Kevin Govender, the director of IAU OAD said, ' This project that Bing Li is leading is a perfect marriage between our cultural astronomical roots and the modern technology we use to observe the stars. I will share how we design and develop the project and show some beautiful works of the competition.

[B3C-3-4]

16:45~17:00

PULSE@Parkes: Hands-On Radio Astronomy for High Schools

R. Hollow (CSIRO Astronomy & Space Science, Australia), G. Hobbs, R. Shannon, and M. Kerr

Since 2007 over 1,100 students across Australia and in the UK, Netherlands, Japan and USA have participated in this innovative program run by CSIRO Astronomy and Space Science (CASS). PULSE@Parkes is a free educational program in which high school students control the 64m Parkes radio telescope remotely via the internet to observe pulsars. Following a background talk presented ahead of the observing session students working in small groups decide which pulsars to observe, control the telescope and gather data. The data is archived and freely and publicly available from the web. Students use the data to determine the distance to pulsars during the session via an online module. They can also use it post-observing session for open-ended student investigations. An integral part of the program is the interaction between the high school students and the professional scientists and PhD students. Data is also utilised by CASS astronomers for other ongoing scientific projects including pulsar timing and the study of nulling and intermittent pulsars. Social media such as Twitter and streaming data via web browser displays allow us to involve a wider audience beyond the students during observing sessions. We outline some of the key points learnt to date in implementing and delivering the project and highlight what makes for effective educational engagement. Plans for future developments are presented along with the potential for expanding a regional or global network of high school students using data from major radio astronomy facilities for student investigations.

Poster Session

17:00~17:30

Chairs: **Hidehiko Agata** (National Astronomical Observatory of Japan)

Thilina Heenatigala (Universe Awareness)