The planetary "Grand Tour" in the Czech Republic

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Abstract

Kosmo Klub is an association of space enthusiasts in the Czech Republic, dedicated to popularization of astronautics and space science since 2004. Its most recent project is the Planetary Trail in Prague. It is a model of the Solar System at 1:1 000 000 000 scale located along a frequented trail for cyclists and pedestrians along the Vltava River. It will provide the visitors with basic information about our cosmic neighborhood, and provide a base for further outreach activities.

1. Introduction

Blazing past the planets in the Solar System is a wonder for our imagination - and bringing the wonder of science to the general public is an important goal for both professional scientists and science popularizers. It educates and entertains at the same time, trains people in critical thinking, and explains the meaning and importance of scientific pursuit. Space sciences belong to the most exciting research fields - a source of fascination for children and adults alike. In the Czech Republic, astronomy outreach activities have quite a long tradition, with a network of public observatories and planetariums, several amateur associations, and many popular science journals and websites. Kosmo Klub is an association of space enthusiasts founded in 2004, which organizes regular public talks about space-related topics, and other activities. The most recent project is the Planetary Trail in Prague, which has opened this year. It is a model of the Solar System at 1:1 000 000 000 scale, featuring all the named bodies larger than 1000 km (34 bodies in total) - the Sun, planets, dwarf planets and large satellites - which are represented by stainless steel spheres. The model is stretched along a trail following the Vltava river, and the distance from the model Sun to the most distant object (Sedna) is 13.5 km. As both the sizes and distances are in the same scale, and most of the bodies are within a direct line of sight, it is possible to observe the correct apparent size of the model Sun (or moons etc.) from any planet up to Saturn. Every single body is accompanied by a label summarizing its important characteristics.

2. Figures

Figure 1: Map of the Planetary Trail. The major featured bodies include the Sun (1), Mercury (2), Venus (3), Earth and Moon (4), Mars (5), Ceres (6), Jupiter system (7), Saturn system (8), Uranus system (9), Neptune and Triton (10), Orcus (11), Pluto and Charon (12), Haumea (13), Quaoar (14), Makemake (15), Eris (16) and Sedna (17).
3. Summary and Conclusions

The Planetary Trail is perhaps one of the most detailed in the world, since it shows large moons as well as planets, and began to serve as a great practical tool for education. Programs for both adults and children are being developed, and we are planning commented walks in collaboration with other outreach organizations. Along with our other activities (teaching astrobiology, organizing popular science talks by guests scientists, collaborating on talks and workshops for pupils, etc.), it presents an opportunity to reach a wider audience and potentially also test the impact of the activities (like we did with our astrobiology seminar this spring, and could conclude that it helps the attendees learn).

Acknowledgements

We would like to thank to all the Planetary Trail builders, especially Tomas Kocourek, who conceived the idea, chose the location and also played a major part in the construction, and to all the members of the participating associations Kosmo Klub and Hvezdolet. We would also like to thank the people and organizations who backed the project in crowdfunding campaign at Startovac.cz.