

The Trail to the Solar System: tours and activities

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Abstract

The Planetary Trail in Prague is an illustrative model of the Solar System built by the members of Czech space enthusiast organization Kosmo Klub in 2018. The Trail features 34 bodies of the Solar System with diameters over 1000 km. The Planetary Trail is freely accessible to the public, but on special occasions it is used for commented walks and excursions for students, and educational activities for children of all ages.

The poster will introduce the Planetary Trail and the connected activities, as well as ideas for future outreach and education projects which are currently being developed at Kosmo Klub.

1. Introduction

The Planetary Trail in Prague is an illustrative model of the Solar System at 1:1 000 000 000 scale. It was built by the members of Czech space enthusiast organization Kosmo Klub, and fully financed by a crowdfunding campaign. Since the opening ceremony in May 2018, it has been visited by thousands of people, from the youngest to the oldest. The Trail features 34 bodies of the Solar System: the Sun, the major planets, and also all named dwarf planets and satellites with diameters over 1000 km. The Planetary Trail follows a trail for cyclists and pedestrians along the Vltava River, with 15,5 km separating the model Sun from the outermost object, Sedna. The model is unique not only in the number of bodies, but also in that it offers direct visibility in a long stretch between the Sun and Saturn. Because both the sizes and mutual distances of the bodies keep the same scale, the visitors can get the feel of the proper scale of the Solar System, and the correct apparent sizes of any celestial body as seen from another - the use of binoculars is recommended. On specific occasions, we have held commented tours

along the Trail for visitors from the public, and also a field trip for astrobiology students. But the Trail is especially attractive for children. We have organized activities, featuring for example educational worksheets and a touchable exhibit of planetary densities.

2. Ideas for future extension

In the future, we plan to add the trans-neptunian object 2007 OR₁₀, once it has received a definitive name. We are also preparing new planet labels to replace the old ones, to make them more informative and readable. We also want to update and expand the web pages of the Trail (current version is available at www.hvezdolet.cz/planetarnistezka.htm), and add English or eventually also other language options.

For the future development of the Trail, several ideas have been proposed, including a “Trail of Time” presenting the geological history of the Earth, or models of notable exoplanetary systems at the same scale.

3. Figures

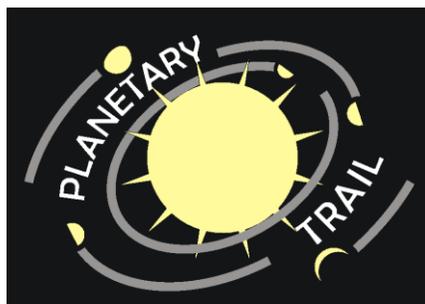


Figure 1: Logo of the Planetary Trail



Figure 2: Demonstration of telescopes during the 2018 opening ceremony



Figure 3: Observations of the Sun during the 2018 opening ceremony



Figure 4: Excursion with astrobiology students

4. Summary and Conclusions

In the first year since its opening, the Planetary Trail has been visited by thousands of people, with very positive reception from both the visitors and the media. It has hosted several educational activities for children, students and the general public, and we hope it will grow even more interesting in the years to come.

Acknowledgements

We would like to thank to all the Planetary Trail builders, 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.