

**OUTREACH ACTIVITY IN PLANETARY SCIENCE AND ASTROBIOLOGY IN THE INTERNATIONAL YEAR OF ASTRONOMY IN HUNGARY.** Mizser A.<sup>1</sup> (Hungarian Astronomical Association, Polaris Observatory, 1032 Bp. Laborc u. 2/C., E-mail: mzs@mcse.hu)

**Introduction:** During the International Year of Astronomy (IYA2009) planetary science and astrobiology related educational and outreach events were organized by the Hungarian Astronomical Association. Some projects are summarized below, to show ideas and possibilities for international partners we are searching for.

**Projects:** The following projects were realized mostly in the Polaris Observatory and partly outside Budapest, together with other organizations:

- *Educational materials* were completed with outreach aspects under the course of Geology of Mars [1,2], Climatic Planetomorphology [3], as well as Astrobiology and planetary evolution [4], in cooperation with the Planetary Science Research Group at Eotvos University.
- *Exoplanet modeling* [5]: in a student camp a 1:2300000000 scale model of the solar system and of exoplanet systems was realized (Fig.1.). The central stars in each cases were sized equal to the Sun. A second model was built up with a smaller scale in the hall of Polaris Observatory.



Fig.1. Exoplanet models: left: XO-3b with 11.8 solar mass (rock) and 1.2 Jupiter diameter (white globe). Right: exoplanet model panels on the wall (globes plus descriptions) with a yellow solar model in the background

- *Mars in 3D:* We published a special issue of the monthly magazine called meteor with anaglyph images, and kept several lectures for the public projecting 3D images of Mars.



Fig. 2. The audience at a 3D demonstration

- *Online articles* on the latest results of planetary research were published at the website called [hirek.csillagaszat.hu](http://hirek.csillagaszat.hu) [6]. We started another website called [tudasbazis.csillagaszat.hu](http://tudasbazis.csillagaszat.hu) with a solar system section. An example screenshot is visible in Fig. 3. on the solar system's mass distribution.

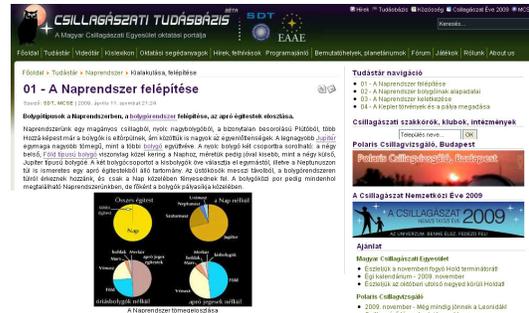


Fig. 3. Screenshot of the "tudasbazis" website

- *Special methods* were also used to make the audience, above all students familiar with planetary research, like the "Play Phoenix" (Fig. 3.) [7] after the mission a small group had to behave as they were individual parts of the probe, to learn the used observing methods used by the spacecraft.



**Conclusion and outlook:** Based on the experiences with the educational materials, online articles and models, could serve a basics for future educational purposes. We are searching for groups from other countries to exchange such educational materials.

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**References:** [1] Horvai, Kereszturi (2009) LPSC #1673. [2] Kereszturi Horvai (2009) EPSC #309, [3] Kereszturi, (2008) 3<sup>rd</sup> Planetology Seminar Budapest, #D3 [4] Kereszturi (2004) LPSC #1070 [5] Kereszturi, Reith, Szabo (2009) Meteor 2009/9. p. 19-21. [6] Kiss, Kereszturi, Magyar Tudomány 2008/8. p. 968. [7] Kereszturi (2009) Meteor 2009/9. p. 34-38..