

## Planetarium and Orbitarium in Toruń

**One of the biggest tourist attractions in Toruń is Planetarium, named after Wł. Dziewulski. It is the most technically advanced planetarium in Poland. Due to its characteristic architectural design - the semicircular dome and rotunda shape, the building is easily recognisable among other structures of Toruń Old Town.**



[1]

Planetarium has been working since 17th February 1994. Its main activity is to show astronomical presentations covering wide range of topics in the field of astronomy.

The heart of planetarium is ZEISSA RFP projector, which reconstructs the image of the sky with great fidelity, from any moment and place on Earth. In other words, it is capable of displaying on the artificial sky (the dome 15 meter in diameter) the arrangement of all 6000 stars visible in the sky, the configuration of planets aligned with the Zodiac in the background, the arrangements of constellations, the Moon's cycles, eclipses- all the phenomena visible from the earth in the real sky. However, it must be noted that in planetarium these phenomena happen much faster than in reality.

Thanks to special projection of 360- angle panoramas we are able not only to present the sky above Toruń Old Town towers but also to visualise the landscapes of other places on our planet. We can also visit the Moon, for instance the landing site of the APPOLLO 17, Mars with its volcanoes and canyons covered with layers of frost, or Venus, brightened up by series of lightning. The visual image of panorama may be improved by the All-Sky system, which covers the dome with a slide picture. The audience is surrounded by the picture and gets the impression of being 'inside' nebulae or star-clusters. Of course, except for being 'inside' specifically astronomical objects, the audience has a possibility to suddenly appear in a forest, inside a cave, or a cathedral.

The system of video projections is the main asset contributing to the creation of special, moving images on the planetarium's sky. By adjusting the optical equipment to conditions of planetarium we achieve immense, moving image covering the part of the dome from the horizon to the zenith. Due to this, we are able to present almost all the astronomical bodies with perfect quality.

---

*I imagine you are a specialist in the Centre of Space Flights Control. You are standing behind the control of the enormous space probe Cassini guiding it in space. Provided for you are cameras, sensors, and a set of board computers. It is not an illusion!*

*Touch it, test it, and experience it in Orbitarium!*

*3...2.....1....0.....Start!*

*The universe is waiting for you.*

*It has never been closer and only in Toruń"!*



[1]

THE ORBITARIUM is a new, original Toruń idea of space popularisation. The basis for its conception was the mission of the space probe Cassini, whose main aim was to examine Saturn, its satellites and to drop a lander called Huygens onto the biggest of the planet's moons - Titan. Nowadays we know that the mission was successful and we all had a chance to admire breathtaking views of that mysterious, although not very friendly world. On January 14th, 2005, when the landing took place, the Channel One (Jedynka) of Polish Television gave a live transmission, and the Orbitarium's hall was a television studio.

The Orbitarium's hall is not only panels controlling the space probe. One can turn on short computer animations on the screens and observe other space missions and learn more about other planets of the Solar System. A set of interactive devices and models were prepared for visitors. They explain interesting phenomena happening in the Universe.

Check if it is true that a remote signal is delayed, how much a person would weigh if they lived on Mars or Saturn, and why Jupiter has a stormy atmosphere.

Thanks to simple, interactive devices one can find answers to many questions and clear descriptions will explain presented phenomena. Everything happens through fun and attractive experiments. A visit to the Orbitarium is a perfect offer for the whole family and school groups alike.

Source: [www.planetarium.torun.pl](http://www.planetarium.torun.pl) [2]

### Odnosiniki:

[1] <http://www.planetarium.torun.pl/>

[2] <http://www.planetarium.torun.pl>