

## WHOO! – White Hole Observatory Opava

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**Abstract.** Introduction of the observatory of Institute of Physics, Faculty of Philosophy and Science, Silesian University in Opava.

**Key words:** observatory – telescope – CCD camera

### 1. Introduction and basic informations about WHOO!

WHOO! is the observatory of the Silesian University in Opava – Institute of Physics, Faculty of Philosophy and Science. Research at the Institute of Physics is mainly focused on compact objects, including black holes, so the “white hole” in the name comes partly from this. The colour of the dome is white. “Whoo” also represents the sound of the nocturnal bird – the owl. From these connections comes the origin of the name.

The dome is on the roof of the university building located on Bezručovo nám. 13. The high position of the observatory provides the excellent view from the dome in all directions.

#### 1.1. The main equipment and instruments in the dome

The diameter of the dome is 3.2 m. The main equipment is a Meade 10” LX200GPS telescope and an ATIK 383L CCD camera with an external filter wheel holding photometric BVRI and photographic RGB filters with Clear. The telescope can also be used for visual observations. For convenience, there is a flip-mirror system.

#### 1.2. Visual and photometric observations

The telescope can be used by students and people from the Silesian University. Students and observers can do visual observations or observations with the

CCD camera – photometry of variable stars, astrophotography, bachelor thesis projects, ...

The telescope is also used for the popularization of astronomy – school visits (mainly pupils and high school students) – and for various groups of visitors. Several times each month public observing events are organized, as well as other special events for the public (European researchers night, lunar eclipses, ...).

### 1.3. Observations of variable stars

The CCD camera is mainly used to do photometry of eclipsing variable stars. Students and observers are currently focused on eccentric binaries, binaries with apsidal motion, binaries with a light-time effect, low mass binaries, and new variable stars.

Observational data and informations about the WHOO! observatory can be found on the website <http://whoo.slu.cz/>.

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