



*Development of a methodology for creating multi-resolution terrain models for Mars and classification of terrain forms using deep learning methods*

**Prof. Robert Olszewski**

Warsaw University of Technology

[PRESENTATION]

The project will involve implementing mutually integrated research tasks. Scientific research is carried out by the team of the Warsaw University of Technology in cooperation with the Jagiellonian University. The first phase will entail developing a spatial big data analysis system using machine learning methods – a system that will enable the creation of large-scale models of the Mars relief. Development of a classification system (task 2) using deep learning, multi-source data, and models from task 1, as well as planetary measurements carried out by Mars rovers Opportunity (Mars Exploration Rover mission) will enable the automation of the process of classifying the terrain forms on Mars.