

During this year's holiday I had the pleasure to participate in the international astronomical camp in Germany IAYC 2013. The three-week stay has resulted in two research works: one was about astrobiology and focused on the study of the conditions and mechanisms for the origin of life (which are also important factors in Drake's equation), including position of the stars relative to the center of the galaxy, planet position relative to the star, and its tectonic activity. The latter concerned the simulation of an unmanned space mission to an extrasolar planet, which consisted, among others, designing instruments, which were equipped with a lander (spectrometer, ionization chamber, camera) and the analysis of the received data. In 2012-2013, I participated twice in the contest "Fascinating Astronomical Phenomena". Research work prepared by me in the third year of middle school concerned black hole information paradox, the holographic principle and the theoretical predictions of the black hole radiation, the temperature of the surface, the Schwarzschild radius for a particular object, specific mass. This year competition work was related to variable stars, their classification and methods of amateur photometry and using the data for the FAUKLES telescopes. From September 2013 the Public High School of the Łódź Technical University started an astronomical club "Altair", which I am the founder and chairman. The main areas of our activities are developing a common passion for astronomy by organizing the observation and astronomical demonstrations using the WorldWide Telescope programme in primary and secondary schools (scheduled for December 2013) and the active participation in the project PlanetHunters. I'm also attending the camps and seminars organized by the nationwide astronomical club Almukantarat and organized in an astronomical circle in the Planetarium and Astronomical Observatory in Łódź.