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Astronomy from the chair - the application of the Internet in promoting of Astronomy

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Internet and modern communication technologies are an indispensable part of modern life. The use of the Internet makes it possible to enhance the education and expand opportunities for acquiring new knowledge. One example is Astronomy, where today thanks to the Internet, we can control telescopes that are distant from us and listen to lectures from Universities in other countries. “Astronomy from the chair” is the name for a concept where amateur astronomers can deal with astronomy from their homes using the Internet. The concept can be divided into four sections depending on the content being offered: Robotic Observatory, Virtual Observatory, Online astronomy broadcasting and Online courses. Robotic observatory is defined as an astronomical instrument and detection system that enables efficient observation without the need of a person’s physical intervention. Virtual Observatory is defined as a collection of databases and software tools that use the Internet as a platform for scientific research. Online astronomy broadcasting is part of concept “Astronomy from the chair” which gives users the opportunity to get directly involved in astronomical observation organized by an amateur astronomer from somewhere in the world. Online courses are groups of sites and organizations that provide the opportunity to amateur astronomers to attend lectures, save and watch video materials from lectures, do homework, communicate with other seminar participants and in that way become familiar with the various areas of Astronomy. This paper discusses a new concept that describes how the Internet can be applied in modern education. In this paper will be described projects that allows a large number of astronomy lovers to do their own research without the need to own a large and expensive set of astronomical equipment (Virtual Telescope from Italy, Observatory “Night Hawk” from Serbia and project “Astronomy from an armchair” at Faculty of Sciences and Mathematics in Nis), to help professional astronomers in research of galaxies, extrasolar systems, Moon etc. without the need of owning the official certificate in Astronomy (Planet Hunters, Moon Zoo) and the possibility to attend online courses in Astronomy (Introduction to Astronomy from the site Coursera). In the end, will be discussion about economic analysis of using robotic observatory in contemporary education and the implementation of research projects, rather than Institutions to invest huge amounts of funds in the purchase and maintenance of the same astronomical equipment.