

Lecture:

"Cooperative communications with confidential messages"

Lecturer:

Dr. Ninoslav Marina

Location: Faculty of Electrical Engineering and Information Technologies Skopje (meetings room)

Date: 20 September 2012 (Thursday)

Time: 12:00

Abstract

In this talk I will present my Marie Curie project called "Cooperative communications with confidential messages". Information-theoretic secrecy is a promising theoretical framework for the future multiterminal communication systems since it uses the ability of the physical layer to provide security of the transmitted data. In this lecture, I will describe few examples on how cooperation can increase the secrecy capacity in a decentralized wireless network. Our investigations show some improvement possibilities, if instead of acting individually, nodes are "encouraged" to cooperate.

Lecturer biography:

Ninoslav Marina received his Dipl. El.-Ing. degree from the "Sv. Kiril i Metodij" University, Skopje, Macedonia, in 1998, and his Ph.D. degree from the Swiss Federal Institute of Technology in Lausanne (EPFL), in January 2004. Part of his thesis was completed at Nokia Research Centre in Helsinki. After the graduation, he worked as a researcher at the Signal Processing Institute at EPFL, and later as a Head of Research and Development at Sowoon Technologies. In 2007 he won the Swiss National Science Foundation Fellowship and was a Visiting Scholar at University of Hawaii at Manoa. During the period 2008 - 2009, he was a Postdoctoral Fellow at University of Oslo. From 2009 till 2012 he was a Visiting Postdoctoral Research Associate at Princeton and currently he is a Visiting Research Collaborator at the same university. In August 2012 he has been appointed as a Rector of the University of Science and Technology "St. Paul the Apostle" in Ohrid.