

COOPERATIVE COMMUNICATIONS WITH CONFIDENTIAL MESSAGES

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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.

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.

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

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