



**University of Pavia**

# **SEMINAR**

## **Sensors, Sensor networks, Sensor Information Processing**

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Institute of Information and Communication Technologies  
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**Tuesday, October 21st - 11:00**

Aula Seminari D Floor, Dipartimento di Ingegneria Industriale e dell'Informazione

**Abstract:** The presentation is prepared to acquaint the scientific staff of Pavia University with the work of a team in the Department “Mathematical Methods for Sensor Information Processing” from the Institute of Information and Communication Technologies - Bulgarian Academy of Sciences. A very short introduction about history of the Department will be given. The main team activities are described. Many sensors are available in IICT - BAS like PTZ IP Cameras, Infrared Camera, Hyperspectral Camera, Superfast Camera, Eye Tracker, Acoustic Camera, Inertial sensors, Laser Sensor, 3D Scanner, and etc. For two of them, more or less unusual (radar and inertial sensors), some interesting facts and information will be shared. Next the sensor networks with actual problems to be solved will be presented. The most extensive part of the talk is devoted to methods for sensor information processing. A general presentation of sensor data fusion will be given. The presentation ends with several examples from MMSIP projects.

**Bio:** Kiril Alexiev is head of the Department of Mathematical Methods for Sensor Information Processing of the Institute of Information and Communication Technologies of the Bulgarian Academy of Sciences in Sofia, Bulgaria. He is member of IEEE, of the Bulgarian Automatic and Control Systems Society and of the Union of Bulgarian mathematicians. He received his Ph.D. in 1997 discussing a thesis on “Radar and Navigation systems”. His professional experiences and research interests include: computer aided design of digital circuits, multi-sensor multi-target tracking, data and information fusion, sensor networks, image processing and super-resolution. He is involved in international and national projects.

<http://mmsip.bas.bg/>

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