



University of Nova Gorica

Amphitheatre Lecture Room - Ajdovščina, Vipavska 11C

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11.00

# The ArTOF: from principles to applications

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The ArTOF (*angular resolved time-of-flight*) is a novel type of angular resolved photoelectron spectrometer. It is based on the combination of time-of-flight electron energy measurement and an electrostatic lens system and offers high energy and angular resolution at an angular acceptance of up to  $\pm 30^\circ$ , resulting in an up to 500 times increased information rate compared to standard hemispherical analysers.

The functional principle of the ArTOF and on-going instrument developments are shown along with recent measurements on solid state samples demonstrating the performance of this electron spectrometer.

Furthermore the new Coincidence-ESCA (CoESCA) station, currently under construction at the synchrotron BESSY II in Berlin is briefly introduced. This station, designed for electron-electron coincidence measurements will be equipped with two ArTOF spectrometers, utilising the high information rate of this instrument together with its high energy and angular resolution capabilities.



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