

Multidimensional electron spectroscopy using ArTOF 10 k spectrometer

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Invité par Catalin MIRON

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Grand Amphi SOLEIL

Séminaires

The holy grail of spectroscopy is to improve resolution and transmission simultaneously. For a given construction the two numbers are conjugated, meaning that an increase of one of them more or less has to decrease the value of the other. Real big steps forward can only be achieved when new principles are implemented.

In the case of electron spectroscopy the semispherical analyser equipped with an electron lens and a multidetection system has been dominating at SR facilities since the middle of the 1990:ies, when the our group in Uppsala launched the SES 200 concept. Very recently we have developed a new concept together with VG Scienta AB - the ArTOF 10 k instruments. These instruments are combining electron optics with time of flight with rather fascinating results. The ultimate theoretical resolution is as low as 150 micro-eV (very difficult to test!) and the transmission is 250 times higher than for the semisperical high resolution spectrometers. The drawback is that the operation necessitates an external trigger pulse (normally from the SR pulse)

The principles for the instrument will be described, together with some recent results and also a discussion on future possibilities for research will be outlined.



Ce séminaire sera suivi d'une pause-Café



Formalités d'entrée : accès libre dans l'amphi du Pavillon d'Accueil. Si la manifestation a lieu dans le Grand Amphi Soleil du Bâtiment Central, merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).

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