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## **【533】 iMott – imaging spin detector based on Mott scattering for spin-resolved ARPES**

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The electron spin is the crucial parameter of modern spintronics and therefore its determination in energy structures of solids is highly important. In order to boost spin-resolved ARPES' efficiency and accessibility, a prototype of a new imaging-type multichannel spin detector for electrons based on Mott scattering is being developed. We present the current status of the project, focusing on the issues of signal acquisition and processing. Two possible operation regimes, namely, «accumulating» and «single-electron counting» modes are compared in conjunction to intensity and signal-to-noise ratio requirements, which determine reliable detection of spin asymmetry. Further development directions are outlined.

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