

<b>Module title</b>		<b>Abbreviation</b>
FOKUS Research Module Methods in Surface Spectroscopy with Mini Research Project		11-FM-MSS-MF-102-mo1
<b>Module coordinator</b>		<b>Module offered by</b>
chairperson of examination committee		Faculty of Physics and Astronomy
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
12	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	11-TQM, 11-KM2 , 11-FK2 (or 11-T3, 11-E5, 11-E7)
<b>Contents</b>		
Experimental determination of the electronic structure of solids and surfaces: Band dispersion and band gaps, quasiparticles, electronic correlations		
<b>Intended learning outcomes</b>		
The students have gained insights into a modern research area neighbouring on different areas of "Condensed Matter", they have acquired basic knowledge for the application of modern methods of surface spectroscopy (photo emission, Auger spectroscopy, spectroscopy with synchrotron radiation etc.) and are able to interpret and present the results obtained with these methods in a presentation or a poster.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
Methods in Surface Spectroscopy: V (3 weekly contact hours), usually English, once a year (winter semester) Kosmologie (Cosmology): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English Kompaktseminar (Block Taught Seminar) Applications of Surface Spectroscopy: S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break) Miniforschungsprojekt zu Surface Spectroscopy (Mini Research Project Surface Spectroscopy): P (2 weekly contact hours)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages)  Assessment components 1 through 3 will be offered in German or English. Students must register for assessment components 1 through 3 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment components 2 and 3 will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**Module appears in**

Master's degree (1 major) FOKUS Physics (2010)

Master's degree (1 major) FOKUS Physics (2011)

Master's degree (1 major) FOKUS Physics (2006)