


Methods, FMF, Fiederle

<p style="text-align: center;"><b>Hall-Effect</b></p> <p style="text-align: center;"><i>Electrical measurements</i></p>	<p>Model: <i>FMF model</i>          Unit and Room: <i>FMF, 3rd floor, R. 03006</i>          Responsible: <i>Dr. M. Fiederle, 203 4775</i>          Further information: <i>www.fmf.uni-freiburg.de/service/servicegruppen/sg_matchar/chat/</i></p>	
<p>Short Description:</p> <p>Measurements of resistivity, carrier concentration and carrier mobility of solid state samples</p>	<p style="text-align: center;">Picture of the Equipment</p> 	
<p>Available Experiments/Techniques:</p> <ul style="list-style-type: none"> <li>- Mappings of resistivity for samples up to 100 mm diameter</li> <li>- Measurements of resistivities from <math>10^5</math> Ohmcm up to <math>10^{12}</math> Ohmcm</li> <li>- Probe station for vacuum and inert gas</li> </ul>		
<p>Special Equipment:</p> <p>Temperature controlling (4 K up to 350 K)          Bias voltages up to 1100 V          Measurements for very low currents (fA) and low voltage (<math>\mu</math>V)          Measurements of high resistivity samples up to <math>10^{12}</math> Ohmcm</p>		
<p>Measurements on the equipment are currently done by:</p>	<p><input type="checkbox"/> Students  <input type="checkbox"/> Students after Introduction  <input checked="" type="checkbox"/> Students after extensive training  <input checked="" type="checkbox"/> Trained scientific service personal</p>	
<p>Recent Publications, where this instrument was important (optional): Give citation</p>		
<p>Typical problems that may be solved with this instrument:</p>	<ul style="list-style-type: none"> <li>- <i>Measurements of resistivity, charge carrier concentration and charge carrier mobility</i></li> <li>- <i>Identification of impurities and defects</i></li> </ul>	