


<b>Module:</b>	<b>Elective Advanced Lectures: Applied Physics</b>
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<b>Module No.:</b> physics70b
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<b>Course:</b>	 universität <b>bonn</b>	<b>Environmental Physics &amp; Energy Physics (A)</b>
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<b>Course No.:</b> physics771
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Category	Type	Language	Teaching hours	CP	Semester
Elective	Lecture	English	2	3	WT

**Requirements for Participation:****Preparation:**

Physik I-V (physik110-physik510)

**Form of Testing and Examination:**

Active contributions during term and written examination

**Length of Course:**

1 semester

**Aims of the Course:**

A deeper understanding of energy & environmental facts and problems from physics (and, if needed, nature or agricultural science) point of view

**Contents of the Course:**

After introduction into related laws of nature and after a review of supply and use of various resources like energy a detailed description on each field of use, use-improvement strategies and constraints and consequences for environment and/or human health & welfare are given.

**Recommended Literature:**

Diekmann, B., Heinloth, K.: Physikalische Grundlagen der Energieerzeugung, Teubner 1997  
 Hensing, I., Pfaffenberger, W., Ströbele, W.: Energiewirtschaft, Oldenbourg 1998  
 Fricke, J., Borst, W., Energie, Oldenbourg 1986  
 Bobin, J. L., Huffer, E., Nifenecker, H., L'Energie de Demain, EDP Sciences 2005  
 Thorndyke, W., Energy and Environment, Addison Wesley 1976  
 Schönwiese, C. D., Diekmann, B., Der Treibhauseffekt, DVA 1986  
 Boeker, E., von Grondelle, R., Physik und Umwelt, Vieweg, 1997