



TECHNISCHE
UNIVERSITÄT
WIEN

INSTITUT FÜR
ANGEWANDTE PHYSIK
Institute of Applied Physics
vormals/formerly
Institut für Allgemeine Physik



Wiedner Hauptstraße 8-10/E134, 1040 Wien/Vienna, Austria – Tel: +43 1 58801 13401 / Fax: +43 1 58801 13499 – E-mail: office@iap.tuwien.ac.at / <http://www.iap.tuwien.ac.at>

IAP-SEMINAR

ANNOUNCEMENT

Date: **Tuesday, 4.4.2017**

Time: **16:00 s.t.**

Location: **Technische Universität Wien, Institut für Angewandte Physik, E134**
yellow tower „B“, 5th floor, Sem.R. DB gelb 05 B (room number
DB05L03), 1040 Wien, Wiedner Hauptstraße 8-10

Lecturer: **Paul Reiter, MSc.**

AIT Austrian Institute of Technology & TU Wien, IAP

Subject: **Investigation of noise barrier sound reflection properties**

Abstract: Traffic noise from roads and railways is not only a daily annoyance for many people, it can also cause severe health problems. Therefore, noise protection is an important task of modern mobility infrastructure. One of the main measures against traffic noise are noise barriers, which are subject to several measurement standards for their evaluation. These measurement standards allow the investigation of relevant parameters, such as sound transmission, sound reflection and sound diffraction over the top edge of a noise barrier. In recent years, in-situ measurement methods have been developed that can be applied directly on the assembled barrier.

This presentation gives an overview on noise barrier design and functionality. Porous absorbers are introduced as novel components of noise barriers. With regard to noise barrier modelling, the way from a simple plane wave acoustic model to a complex simulation model is shown. This enables the prediction of the in-situ reflection performance of a noise barrier already in the planning phase.

*All interested colleagues are welcome to this seminar lecture
(45 minutes presentation followed by discussion).*

*M. Gröschl e.h.
(Seminar-Chairpersons)*

*F. Aumayr e.h.
(LVA-Leiter)*