airbourne sound d d d ground vibrations

Sound and ground vibrations from a wind turbine



Combined sensor box for sound and vibrations

Localisation of Infrasound from Wind Turbines

Internship or Masterthesis at the DLR Department of Engine Acoustics in Berlin

The DLR department of Engine Acoustics in Berlin is looking for motivated students with an interest in processing signals from sound and vibration measurements. We offer an internship or a Master thesis on the subject of sound source localisation in the infrasound part of the spectrum on wind turbines

Data will be acquired in field measurements and the data will be analysed using Python scripts based on the public domain library Acoular that has been developed by TU Berlin. The measurements will be performed in the countryside around Berlin and on DLRs own research wind park Vivaldi in Krummendeich near Hamburg.

The challenge is to extract the infrasound part of the spectrum from the acoustic and vibration data to evaluate propagation times and phase differences between different source positions and measurement stations.

Financial support for interns from foreign universities can be paid according to the rates set by IAESTE (International Association for the Exchange of Students for Technical Experience), which currently is at about 861 \in . Master theses can be supported with student jobs, for 20 or 40 working hours per week

This task requires a good background knowledge in acoustics, signal processing and programming in Python 3, ideally with some experience in using Acoular.

If you are interested, send your application to Dr.-Ing. Henri Siller: <u>Henri.Siller@dlr.de</u> Tel.: +49 (030) 310 006 57

