

HITEC Day

Title: Energy Meteorology

Date: 17 November 2015

Time: 8:30 –15:40
afterwards *get together* with snacks and drinks

Location: University of Cologne ► Lecture Hall 4.001, Höninger Weg 100
50969 Köln

Press door bell 'Hörsaal Uni Köln'; door opens automatically, take elevator to 4th floor.
Stops of tram 12 and bus 142 at 'Pohligstraße' (at the building), entrance from Höninger Weg.

Energy Meteorology comprises a novel research area, which deals with the efficient use of the volatile power input gained from wind and solar insolation. It covers active research areas such as plant location planning, forecasting of available power for energy stock markets and grid stability management, including wind and solar power capture, power grid integration and optimisation technologies.

Consequently, the seminar will elucidate different critical aspects of the transition to and implementation of renewable energy sources from the meteorological realm.

Mostly external experts are invited to cover the diversity of facets of the atmospheric portion of renewable energy production.

You will learn about:

- the fundamentals of energy meteorology and the meteorological conditions
- prediction and predictability of the relevant parameters and its importance for plannings on a manifolds of time scales
- the assessment of site locations for meteorological energy production
- materials for photovoltaics and its performance analyses
- the impact of aerosols on radiation
- making and interpretation of meteorological forecasts for power production
- solar power predictions, including characteristics of the power sources wind and sun, fluctuations and smoothing effect, predictability of feed-in

Who should attend:

HITEC Ph.D.-fellows;
Postgraduate-, Ph.D.- and postdoctoral fellows from the fields of energy and climate research

HITEC Days

HITEC Days are an inherent part of the graduate school Helmholtz Interdisciplinary Doctoral Training in Energy and Climate Research (HITEC). They devote a whole day to a method or a scientific topic with lectures and discussions. The methodological days serve to encourage scientific interdisciplinarity and will enable the PhD students to extend their range of methods with respect to their own scientific work. HITEC Days always end with a 'Get together', some snacks and drinks. HITEC Days are open for HITEC Ph.D. students and other interested young scientists.