The University of Bayreuth, Germany is a research-oriented university with internationally competitive, interdisciplinary focal areas in ecology & environmental sciences and non-linear dynamics. The **Micrometeorology Group** invites applications for two fixed-term positions in the fields of atmospheric turbulence and air-land surface interactions of a

Postdoctoral Researcher and

Doctoral (PhD) Student

in modeling the atmospheric weak-wind boundary-layer using Large Eddy Simulation (LES)

to commence in May 2019. Commensurate with qualification and experience, the appointments will be made for a period of 36 months .

You will conduct research as part of the project titled '**DarkMix: Illuminating the dark side of surface meteorology: creating a novel framework to explain atmospheric transport and turbulent mixing in the weak-wind boundary layer**' funded by the European Research Council (ERC) through a Consolidator Grant. Its technical innovation is the use of fiber-optic distributed temperature sensing to observe airflow and heat transport in a 3-dimensional fashion (Large Eddy Observation, LEO). The ultimate goal is formulating a novel theoretical framework explaining transport and mixing in the stable, weak-wind boundary layer. The development of the LEO facilitates the first at-scale evaluations of the Large Eddy Simulation (LES) technique. Both the postdoc and PhD student will employ LES modeling informed by the novel LEO observations towards the novel framework while working with the larger DarkMix research team.

Postdoc Position:
You are expected to lead the LES modeling component of the DarkMix project, including mentoring the associated PhD student. You have completed a doctoral (PhD) degree in a discipline related to meteorology, atmospheric sciences, or environmental physics. You are fluent in English (both conversation and writing), have a solid publication record in international peer-reviewed journals commensurate with experience, and scientific and report writing comes easily to you. You have expertise with Large-Eddy Simulations. A background in the PALM model will put you at an advantage. A track record of mentoring students is desirable. You work well with a team, embrace new methods and ideas, have contagious enthusiasm, and can have fun with your research.

PhD Position:
You have completed a graduate degree (Master's) in a physics- or math-related field, especially in an atmospheric- or meteorology-related discipline. You are fluent in English (both conversation and writing). Previous experience working with atmospheric models will put you at an advantage. You are self-motivated, able to work as part of a larger interdisciplinary team, and are creative.

If you have any questions about the DarkMix project, responsibilities, or your qualifications, please contact me at christoph.thomas@uni-bayreuth.de and/ or consult our webpage.

The salary will be determined in accordance with the national guidelines for civil service (TV-L) at pay grade E13 (postdoc: 100%, PhD: 65%) . **We hope to fill both positions by May, 2019, but both positions are open until filled by the best candidate.** Interested?

Excellent! Please send your

- Resume/ CV including copies of transcripts and diplomas,
- Cover letter indicating how your qualifications and experience have prepared you for this position, and
- Names of up to three professional references, their e-mail addresses and telephone numbers

in English as a single PDF file (with up to 30 MB in size) using the keywords **'DarkMix Postdoc 2' or 'DarkMix PhD 3' as the subject** to the following address: Prof. Dr. Christoph Thomas, christoph.thomas@uni-bayreuth.de.

The University of Bayreuth commits to inclusive excellence by advancing equity and diversity in all its activities. As an Equal Opportunity employer we particularly encourage applications from members of underrepresented groups, women, and individuals with disabilities. Applications from persons with disabilities will be favored when all other qualifications are identical.