

The **Friedrich-Alexander-Universität Erlangen-Nürnberg** is looking for a

**mathematician or geophysicist**  
**(TVL-13 100%, 24 months)**

within the project TAPE “Tapping the Potential of Earth Observation”. The project is funded by the University of Erlangen-Nürnberg within its Emerging Field Initiative (EFI). The position is a collaboration between the **Institut für Geographie (Remote Sensing & GIS, Prof. Braun)** and the **Department of Mathematics (Applied Mathematics, Prof. Bänsch)**.

The project aims at transferring methodologies developed in mathematics to applications in glaciology and remote sensing. Specifically we aim at improving remote sensing products by new methods to efficiently fill temporal and spatial gaps in remote sensing products (e.g. due to temporal decorrelation or geometric effects). A second component will deal with improved posteriori uncertainty estimates of modelling products originating from geophysical model inversion with remote sensing input. A promising scheme is based on dual systems that measure the sensitivity of the error functional with respect to perturbations in the solution.

**Desired qualifications:**

- background in mathematics, (geo-)physics or related field
- experience with geophysical modelling
- experience with high performance computing
- programming skills (e.g. R, Python and/or Linux shell)
- experience with peer reviewed publication
- PhD in a related field (thesis submission by employment date required)
- fluency in English
- knowledge of German is of advantage

The intended starting date is April 01<sup>st</sup> 2019. The employment is limited to 24 months due to availability of project funds with a possibility of extension depending on successful project completion/prolongation or other third-party funding. The employment is full time with 100% of the regular working load. Depending on qualification and personal requirements this position is grouped into Entgelt-/Bes.Gr. E13.

The Friedrich-Alexander-Universität Erlangen-Nürnberg is seeking to augment the number of women in research and teaching and hence asks female scientists in particular to apply for this position. Handicapped persons will be preferred in case of equal ability and qualifications. If desired, a member of the equal opportunity office of FAU can participate in the selection process without any disadvantage for the applicant.

Please submit your full **applications** including CV, certificates, motivation letter as **one single PDF-file** to **sabine.donner@fau.de** (reference: **EFI MathGEO**).

**Deadline for application:** 20 January 2019, the position is open until filled

**Further information:** Prof. Dr. Matthias Brau, Institut für Geographie, FAU, phone +49-(0)9131-85-22015 / -22510, [matthias.h.brau@fau.de](mailto:matthias.h.brau@fau.de) or

Prof. Dr. Eberhard Bänsch, Department of Mathematics, Applied Mathematics, FAU, phone +49-(0)9131-85-67202, [baensch@am.uni-erlangen.de](mailto:baensch@am.uni-erlangen.de)