



**Prof. Dr. Matthias Braun**  
Wetterkreuz 15, D-91058 Erlangen  
Telefon +49 9131 85-22015  
[matthias.h.braun@fau.de](mailto:matthias.h.braun@fau.de)

*Advanced Methods MSc: Remote Sensing:*  
**Spectroscopy and Analysis of Spectral Data**  
*Prof. Dr. Matthias Braun*

**Study programs:** Master Climate 6 Environmental Sciences, MA Kulturgeographie

**ECTS:** 5 (2 SWS)

**No. participants:** 20

**Language:** English

**Entry requirements:** basic knowledge of multispectral remote sensing (like different sensors & platforms, indices, applications, spectral behaviour of different surfaces), digital image processing (supervised/unsupervised classification techniques, simple change detection)

**Class aims:**

- get to know different advanced classification techniques and additional approaches for analyses of spectral data/imagery
- improve your presentation skill
- critical science interpretation

**Content & structure:**

In the weekly seminar, we will discuss papers that introduce the specific methods. For each seminar sessions, students will read 1-2 papers to a specific method and pose questions in a forum. During the respective sessions, the methods will be introduced and explained in more detail incl. background by one student (presentation + term paper). We will then jointly go through the questions posed in the forum to the introducing paper and discuss them based on our joint understanding and the talk given in this session.

**Examination:** Presentation and term paper (15-20 pages), contribution to discussions

**When:** see UNIVIS

**Obligatory prep. meeting:** first seminar meeting