

# Open Seminar Series

## Geoscience & Remote Sensing

### The Past as Seen from Space: Remote Sensing and Digital Image Analysis in Archaeology

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***12.40 – 13.30***

***CiTG room F***

Archaeological prospection is concerned with the search for, and documentation of, archaeological sites and features. Visual inspection of aerial images has aided this procedure for almost a century. However, more recent remotely sensed data such as satellite images are associated with powerful tools for digital image processing and analysis, including pattern recognition and feature extraction. While such tools are successfully applied in geography, cartography and a wide range of other disciplines, archaeology has been lagging behind due to the fragmented nature of the archaeological record: Ancient sites and features that are badly preserved and fully or partially covered are hard to detect in images, be it through visual inspection or digital image analysis.

In spite of these adverse conditions, recent interdisciplinary research has led to the development of the first tools that allow archaeological sites and features to be automatically detected in remotely sensed images. Using my own research in the Silvretta Alps (Switzerland/Austria) and other case studies as examples, in this talk I will discuss the chances and limitations of automated approaches to archaeological prospection based on remote sensing and digital image analysis from the user's point of view.



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