

## The Archaeolingua Foundation and the Central European University

cordially invites you to the first lecture of

### Integrated Utilization of Advanced Technology in Archaeology and Heritage Preservation Today

Master Course and Continuing Professional Education Course

by

### Michael Doneus

Department of Prehistoric and Historical Archaeology, University of Vienna.  
Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology

## Non-invasive Techniques for Prospecting Archaeological Landscapes: Current Techniques & Future Developments

17:30 p.m. on Monday, November 23, 2015  
CEU–Auditorium, Budapest, V. Nádor u. 9.



Surface model of the Croatian Island of Palacol derived from Structure from Motion (Image: Geert Verhoeven)

The term "*landscape*" comprises both physical as well as cognitive space, with the latter referring to the concept of its dwellers. Based on the description of its physical remains in the form of archaeological and palaeo-environmental structures, an interpretation of its meaning has to be sought. There seems, however, still to exist a division between technical and interpretative approaches when investigating archaeological landscapes. The mission of the *Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology* is to bridge this divide by developing systematic, high-resolution, large-scale, integrated archaeological prospection ap-

proaches while at the same time focusing on novel methodological concepts for the archaeological interpretation of the in great quantity and quality collected data. By integrating traditional methods with near-surface geophysical as well as remote sensing techniques entire landscapes are thoroughly documented at multiple scales. The generated data form the basis for a four-dimensional GIS-based interpretation approach. All developments are systematically tested in the framework of international large-scale case studies conducted in Austria, Great Britain, Sweden, Norway and Germany. The results demonstrate that it has become possible and affordable today to acquire high-resolution data across large areas, measuring square kilometres rather than hectares. In combination with modern interpretation techniques this novel approach heralds a new era in archaeology, where archaeological excavation is no longer the primary source of information for archaeological research.

**Michael Doneus** is Professor for Landscape Archaeology at the Department of Prehistoric and Historical Archaeology at the University of Vienna. He is also Deputy Director of the Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology. He is specialized in landscape archaeology, archaeological remote sensing (aerial archaeology, airborne laser scanning, imaging spectroscopy), photogrammetry, surveying and GIS and has an international reputation as committee member of the Aerial Archaeology Research Group, and as committee member of the ICOS & ISPRS committee for the Documentation of Cultural Heritage (CIPA).

**Introduction by József Laszlovsky** (Department of Medieval Studies, Cultural Heritage Studies Program, CEU)

**The session will be moderated and the lecture summarized in Hungarian by Erzsébet Jerem** (Director of Archaeolingua Foundation, Senior Research Fellow at Hungarian Academy of Sciences, Research Centre for the Humanities, Institute of Archaeology, Budapest).