

## EINLADUNG

Zeit: Donnerstag, 12. April 2007, 17.00 Uhr  
Ort: Hörsaal AH I, Ahornstr. 55  
Referent: Prof. Dr. Peter Baumann  
Jacobs University Bremen  
Thema: **Serving Large-Scale Spatio-Temporal Raster Data**

**Abstract** Multi-dimensional raster data appear in a large variety, e.g, 1-D sensor time series, 2-D satellite imagery, 3-D image time series and exploration data, 4-D climate models, n-D OLAP cubes; sizes frequently amount to Tera- and Petabytes per object. With GoogleEarth it has become generally accepted that online services on spatio-temporal raster data are feasible. Database systems should be the natural tool for such services – however, due to their insufficient support they are hardly used in this domain.

We present an algebraically founded approach to modeling, storing, and querying raster data stored in relational databases. Both conceptual and architectural issues are addressed, in particular query and storage optimization. Examples from geo and life sciences serve to illustrate the techniques employed and to outline future research avenues.

Es laden ein: Die Dozenten der Informatik