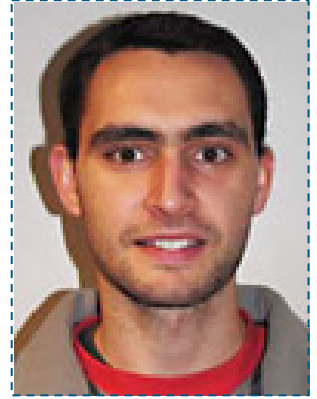# Visual Computing Forum

Modeling Terrains and Subsurface Geology

Natali Mattia

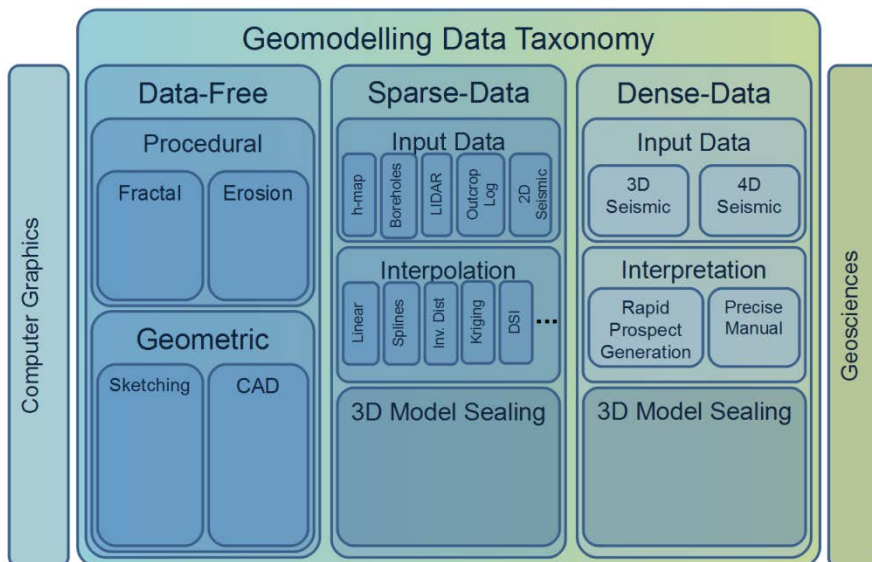Visualization Group, University of Bergen

Friday Apr 26, 2013, **10.15-11.15**
Konferanserom B (TM51:KONFB)
VilVite Science Center, Thormølensgate 51

Abstract:

The process of creating terrain and landscape models is important in a variety of computer graphics and visualization applications: from films and computer games, via flight simulators and landscape planning, to scientific visualization and subsurface modelling. Interestingly, the modelling techniques used in this large range of application areas have started to meet in the last years. New trends in geological modelling are approaching the modelling methods that have been developed in computer graphics. I will give an introduction to the process of geological modelling followed by two taxonomies with descriptions and comparisons of selected methods. The first taxonomy of different modelling methods is a data oriented taxonomy, where modelling is categorized into three different scenarios: the data-free, the sparse-data and the dense-data scenario. Then I will show a workflow oriented taxonomy, where modelling is divided into the separate stages necessary for creating a geological model.