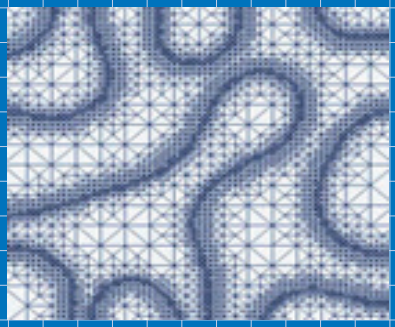
Berlin
Mathematical
School

BMS Fridays Colloquium

Friday, 24 April 2009, 2:00 pm

Tea before the lecture starts at 1 pm

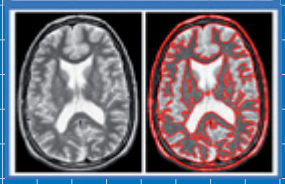
BMS Loft, Urania
An der Urania 17, 10787 Berlin



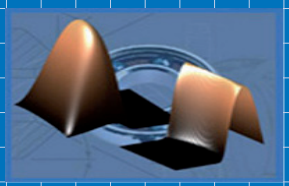
Michael Hintermüller (HU Berlin):

"Use Level Sets and Relax!"

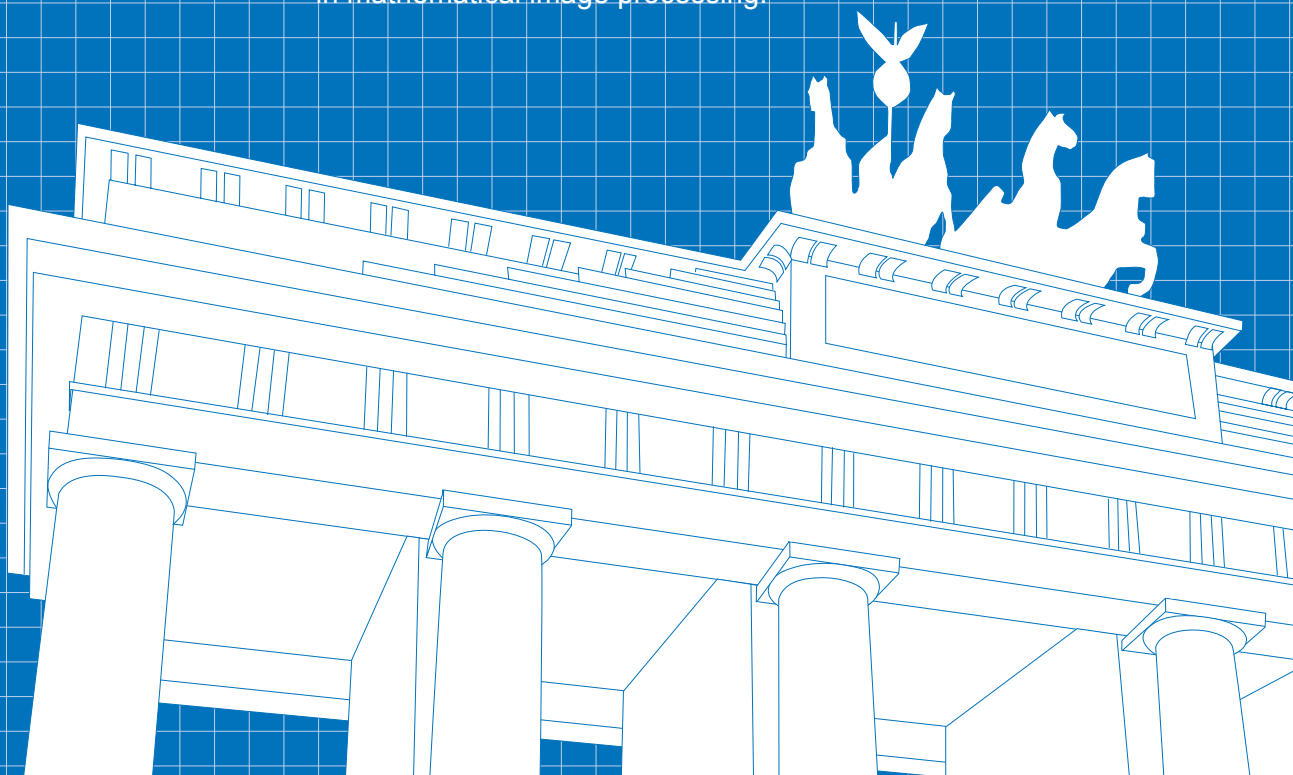
Shape/Topological Sensitivity, Level Set Methods and Applications in Imaging



Level set methods are a versatile tool in interface and moving boundary problems. In the context of shape and topology optimization, they are used for updating geometric variables.



In this talk, the basic level set mechanism is intertwined with tools from shape and topological sensitivities in order to define gradient-related and Newton-type descent flows. Together with a recently developed relaxation scheme for binary-valued problems, these techniques will be used in mathematical image processing.



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