



# Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg  
Lehrstuhl für Wissenschaftliches Rechnen IX

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## Automated image restoration and segmentation using Mumford-Shah-like regularization and topological asymptotic expansion

In the talk, I will introduce an approach to the problem of automated image restoration and segmentation. To solve these tasks simultaneously, I will consider the Mumford-Shah-like regularization.

I will explain how the results of topological asymptotic analysis can be applied to prove the existence of minimizers of the proposed functional and used to construct the method for their computation.

Moreover, within the same theoretical framework, I will introduce novel criteria for selecting optimal values for two regularization parameters presented in the model.

Ort: Raum 30.03.007 (Mathematik West, 3.Stock)

Zeit: Donnerstag, 28.10.2021, 14:00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.  
You are cordially invited to this lecture.

gez. Prof. Dr. Alfio Borzi  
gez. Prof. Dr. Frank Werner