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## DK Seminar

Jun 21, 2017, 14:15 - 15:30  
University of Vienna,  
Oskar-Morgenstern-Platz 1, HR 2

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University of Vienna

### Regularization of Functionals of Sphere-valued Functions

In this talk we will present an energy for image denoising taking into account the geometry of the sphere, i.e. given Sphere-valued functions distance and jumps are measured properly. First we will derive the energy by adapting the classical Rudin-Osher-Fatemi-Model including the Total Variation regularization term to our setting. Therefore we use an alternative approach to Sobolev spaces. Then we will proof existence of minimizers via the direct method and show a stability result. This is joint work with Otmar Scherzer and René Ciak.