

## Minisymposium 3

### Approximierungsmethoden und schnelle Algorithmen

Ralf Hielscher (Chemnitz), Stefan Kunis (Osnabrück)

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**Mittwoch, 21. September**                      **Seminargebäude, S26**

- 16:00        Antje Vollrath (Braunschweig)  
*A new algorithm for fast Fourier transforms on the rotation group*
- 17:00        Michael Pippig (Chemnitz)  
*Parallel fast Fourier transforms and their application to particle simulation*
- 17:30        Frank Filbir (München)  
*Approximation on Manifolds*
- 18:00        Brigitte Forster (München)  
*Polyzyklische Quotienten und nicht-kommutative Gröbner-Basen*
- 18:30        Jürgen Prestin (Lübeck)  
*Quadrature Rules for Scattered Data on Spherical Triangles*

**Donnerstag, 22. September**                      **Seminargebäude, S26**

- 14:00        Holger Rauhut (Bonn)  
*Recovery of functions in high dimensions via compressive sensing*
- 14:30        Boris N. Khoromskij (Leipzig)  
*Fourier and convolution transforms of  $m$ -tensors in log-volume complexity by quantized TT approximation*
- 15:00        Jan Hamaekers (St. Augustin)  
*HCFFT: A fast Fourier transformation software library for general hyperbolic cross/sparse grid spaces*
- 15:30        Lutz Kämmerer (Chemnitz)  
*Stable interpolation of hyperbolic cross trigonometric polynomials*

**16:00h – 16:30h Pause**

- 16:30        Bastian Harrach (München)  
*Fast shape-reconstruction in electrical impedance tomography*
- 17:00        Florian Boßmann (Göttingen)  
*Model based image pattern recognition in ultrasonic non destructive testing*
- 17:30        Sören Häuser (Kaiserslautern)  
*Shearlet Coorbit Spaces: Traces and Embeddings*
- 18:00        Jürgen Frikel (München)  
*A new framework for tomographic reconstruction at a limited angular range*