

Dr. Frank Filbir	* 1959	Primary WP: Head of Research Group
	Scientific degree: Previous position: Current position:	PhD, Mathematics Researcher, Helmut-Schmid University (Universität der Bundeswehr) and University of Hamburg Researcher, University Lübeck Head of Research group "Approximation Theory" Helmholtz Center Munich Head of Research Group "Mathematical Imaging and Data Analysis" at Helmholtz Center Munich, Associated member of Chair M15, "Applied Numerical Analysis" at Technische Universität München.
	Prizes, Awards	Award of the Hurwitz Society of Technische Universität München
Recent Research Topics Projects Editorships (last 5 years) Reviewer	Inverse Problems, Mathematical Methods for Data Analysis, Harmonic Analysis, Approximation Theory. - Imaging at the Limit, Helmholtz Association, 2017-present - Fourier-Transformation auf der Rotationsgruppe, DFG : FI 883/3-2 . 2008-2015 - Mathematische Methoden zur Analyse und Synthese komplexer Daten aus unterschiedlichen Experimenten, Teilprojekt C07, SFB 607: Wachstum und Parasitenabwehr-Wettbewerb um Ressourcen in Nutzpflanzen. 2001-2010 - Differentielle Optische Absorptions-Spektroskopie, TU München, 2001-2002 Associated Editor of " <i>Mathematics of Computation and Data Science</i> " (Frontiers in Applied Mathematics and Statistics) DFG (German Science Foundation, Germany) NSF (National Science Foundation, USA) Science Fund, Austrian National Bank, Austria	
Publications (selection) [1] Ehler, M., Filbir, F. , Metric entropy, n-width, and sampling of functions on manifolds, <i>Journal of Approx. Theory</i> , 225, 41-57, (2018). [2] Chui, C.K., Filbir, F. , Mhaskar, H.N., <i>Representation of functions on big data: Graphs and trees</i> . <i>Applied and Computational Harmonic Analysis</i> . 38, 489–509 (2015). [3] Filbir, F. , Kunis, S., Seyfried, R., <i>Effective Discretization of Direct Reconstruction Schemes for Photoacoustic Imaging in Spherical Geometries</i> . <i>SIAM Journal on Numerical Analysis</i> . 52, 2722–2742 (2014). [4] Ehler, M., Filbir, F. , Mhaskar, H.N., <i>Locally Learning Biomedical Data Using Diffusion Frames</i> . <i>Journal of Computational Biology</i> . 19, 1251–1264 (2012). [5] Filbir, F. , Mhaskar, H.N., Prestin, J., <i>On the Problem of Parameter Estimation in Exponential Sums</i> . <i>Constructive Approximation</i> . 35, 323–343 (2011). [6] Filbir, F. , Mhaskar, H.N.: A Quadrature Formula for Diffusion Polynomials Corresponding to a Generalized Heat Kernel. <i>J Fourier Anal Appl</i> . 16, 629–657 (2010) [7] Filbir, F. , Mhaskar, H.N.: Marcinkiewicz-Zygmund Measures on Manifolds. <i>Journal of Complexity</i> . 27, 568–596 (2011) [8] Filbir, F. , Hielscher, R., Madych, W.R., <i>Reconstruction from circular and spherical mean data</i> . <i>Applied and Computational Harmonic Analysis</i> . 29, 111–120 (2010).		

