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## Qualifikationen

Mathematik, Habilitation, Asymptotic behaviour of linear and nonlinear evolution equations, Universität Ulm  
Datum der Bewilligung: 1 Juli 2002

Mathematik, Promotion, Fourier transforms and asymptotics of evolution equations, Universität Ulm  
Datum der Bewilligung: 7 Dez. 1998

Mathematik, Diplom, Eberhard Karls Universität Tübingen  
Datum der Bewilligung: 1 Dez. 1995

## Organisationszugehörigkeiten

**Wissenschaftliches Personal**  
Professur für Funktionalanalysis  
Technische Universität Dresden  
1 Okt. 2011 → present

**Professor:in**  
Université de Metz  
Frankreich  
1 Sept. 2005 → 30 Sept. 2011

**Wissenschaftliche:r Mitarbeiter:in**  
Universität Ulm  
Ulm, Deutschland  
1 Jan. 2002 → 31 Aug. 2005

**PostDoc**  
Université Pierre-et-Marie-Curie  
Paris, Frankreich  
1 Okt. 2000 → 31 Dez. 2001

**Wissenschaftliche:r Mitarbeiter:in**  
Universität Ulm  
Ulm, Deutschland  
1 Okt. 1998 → 30 Sept. 2000

**Doktorand:in**  
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1 Jan. 1996 → 7 Dez. 1998

## Publikationen

**Real interpolation of functions with applications to accretive operators on Banach spaces**  
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**Domination of nonlinear semigroups generated by regular, local Dirichlet forms**

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**Atomic operators on vector lattices**

Chill, R. & Pliev, M., 2020, in: Mediterranean Journal of Mathematics. 2020, 17, 20 S., Paper No. 138.

**Interpolation of nonlinear positive or order preserving operators on Banach lattices**

Chill, R., Fiorenza, A. & Krol, S., 2020, in: Positivity. 24, 3, S. 507-532

**Semi-uniform stability of  $C_0$ -semigroups and energy decay of damped waves**

Chill, R., Seifert, D. & Tomilov, Y., 2020, in: Philosophical transactions of the Royal Society: Series A, Mathematical, physical and engineering sciences. 378, 24 S., no. 2185.

**The bidomain problem as a gradient system**

Belhachmi, Z. & Chill, R., 2020, in: Journal of Differential Equations. 268, 11, S. 6598-6610 13 S.

**Corrigendum to: Dirichlet and Neumann boundary conditions for the p-Laplace operator: what is in between?**

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**Extrapolation of  $L^p$  maximal regularity for second order Cauchy problems**  
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**Real interpolation with weighted rearrangement invariant Banach function spaces**  
Chill, R. & Krol, S., 2017, in: *Journal of Evolution Equations*. 17, 1, S. 173-195

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**Fine scales of decay of operator semigroups**  
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**Singular integral operators with operator-valued kernels, and extrapolation of maximal regularity into rearrangement invariant Banach function spaces**  
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**A Riesz type representation for lower semi-continuous, monotone, local functionals on  $C_c(X)^+$**   
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**Dirichlet and Neumann boundary conditions for the  $p$ -Laplace operator: what is in between?**  
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**Every ordinary differential equation with a strict Lyapunov function is a gradient system**  
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**Maximal regularity, the local inverse function theorem, and local well-posedness for the curve shortening flow**  
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Willmore blowups are never compact  
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Chill, R., Fasangova, E. & Prüss, J., 2006, in: *Mathematische Nachrichten*. 279, 13-14, S. 1448-1462

The Łojasiewicz-Simon gradient inequality in Hilbert spaces  
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The sector of analyticity of nonsymmetric submarkovian semigroups generated by elliptic operators  
Chill, R., Fasangova, E., Metafune, G. & Pallara, D., 2006, in: *Comptes Rendus Mathematique*. 342, 12, S. 909-914

Convergence to steady states of solutions of semilinear evolutionary integral equations  
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$L^p$ -maximal regularity for second order Cauchy problems  
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A remark about the interpolation of spaces of continuous, vector-valued functions  
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Asymptotic behaviour of linear evolutionary integral equations  
Chill, R. & Prüss, J., 2001, in: *Integral Equations and Operator Theory*. 39, S. 193-213

Asymptotic behaviour of  $C_0$ -semigroups with bounded local resolvents  
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Bounded convolutions and solutions of inhomogeneous Cauchy problems  
Batty, C. & Chill, R., 1999, in: *Forum Mathematicum*. 11, 2, S. 253-277

Tauberian theorems for vector-valued Fourier and Laplace transforms  
Chill, R., 1998, in: *Studia Mathematica*. 128, S. 55-69

Stability results for individual solutions of the abstract Cauchy problem via Tauberian theorems  
Chill, R., 1996