Tomáš Dohnal	Curriculum Vitae

CONTACT INFORMATION	Institut für Mathematik Martin-Luther-Universität Halle-Wittenberg 06099 Halle (Saale), Germany	*Voice:* +49-345-55-24625 *E-mail:* tomas.dohnal@mathematik.uni-halle.de https://www2.mathematik.uni-halle.de/dohnal/

RESEARCH INTERESTS	• wave propagation problems • dispersive PDEs, wave-packet dynamics • PDE asymptotics and their rigorous justification • PDE bifurcation problems • solitary waves in periodic structures and at surfaces • numerics for wave problems

EDUCATION

Karlsruhe Institute of Technology, Karlsruhe, Germany

Habilitation   **May 2012**
- Localized Waves in Periodic Structures

University of New Mexico (UNM), Albuquerque, NM, USA

Ph.D., applied mathematics (defended with distinction)   **Sep. 2002 - Jul. 2005**
- dissertation title: Optical bullets in (2+1)D photonic structures and their interaction with localized defects
- advisor: Prof. Alejandro B. Aceves

M.S., applied mathematics   **Jan. 2001 - Aug. 2002**

Technical University in Liberec, Liberec, Czech Republic

M.A., teaching of mathematics and of English as a foreign language   **1995-2000**

PROFESSIONAL
EXPERIENCE

Martin Luther University Halle-Wittenberg, Germany

Institute of Mathematics   **from 2/2018**
Professor in applied analysis
Institute director, from 10/2019

Technical University of Dortmund - Department of Mathematics, Germany

Institute of Analysis   **9/2012 - 1/2017**
Junior-Professor in applied analysis

Karlsruhe Institute of Technology - Department of Mathematics, Germany

Institute for Applied and Numerical Mathematics 3   **10/2011 - 8/2012**
wissenschaftlicher Mitarbeiter

Postdoc, Research Training Group 1294   **7/2009 - 9/2010, 4/2011 - 9/2011**
'Analysis, Simulation and Design of Nanotechnological Processes'

University of Stuttgart - Department of Mathematics, Germany
'Substitute Professor' **10/2010 - 3/2011**

Humboldt Research Fellowship, University of Karlsruhe, Germany

Institute for Applied and Numerical Mathematics 2 **10/2007 - 6/2009**
host: Prof. Willy Dörfler

ETH - Seminar for Applied Mathematics, Zürich, Switzerland

Postdoc (group of Prof. Ralf Hiptmair) **9/2005 - 10/2007**

University of New Mexico - Department of Mathematics, Albuquerque, NM, USA

Research Assistant **8/2003 - 7/2005**
principal investigator: Prof. Alejandro B. Aceves

Research Assistant **spring 2003**
principal investigator: Prof. Timothy Warburton

Teaching Assistant **2001 - 2002**

Los Alamos National Laboratories, group T7, Los Alamos, NM, USA

graduate student affiliate **summer 2004**
mentor: Dr. Avner Peleg

graduate student affiliate **summer 2003**
mentor: Dr. James M. Hyman

STUDENT
SUPERVISION
3 PhD students, incl. 2 ongoing

5 Master students, incl. 2 ongoing

8 Bachelor students

GRANTS

DFG Research Grant **12/2018 - 6/2022**
- ca. 199 000 EUR
- Rigorous Asymptotics of Surface Plasmon Polariton Wavepackets in Nonlinear Media

DFG Research Grant **10/2014 - 9/2017**
- ca. 125 000 EUR
- Moving Gap Solitons in Deep Periodic Structures with Transversally Crossing Bands

Humboldt-Fellowship **10/2007 - 6/2009**
- own postdoc position for 21 months
- Gap Solitons in Nonlinear Periodic Media - Modeling, Numerical Computations and Simulations in Physical Processes

PERSONAL   married, 3 children
INFORMATION

Date: November 21, 2021