

Curriculum Vitae of Astrid Pechstein

Name : Dipl.-Ing. Dr. Astrid Sabine Pechstein, née Sinwel

Personal information:

Date of birth: April 22, 1983
Place of birth: Linz
Family status: married, two children
Nationality: Austria

Education:

Oct 2020: **Habilitation:** “Novel Finite Element Techniques for Computational Mechanics” – *venia docendi* in Computational Mechanics
Feb 2009: **Dissertation:** “A New Family of Mixed Finite Elements for Elasticity”, Johannes Kepler University (JKU) Linz.
Mar 2006 – Feb 2009: PhD studies at JKU Linz, supervision by Prof. J. Schöberl (RWTH Aachen), Promotion *sub auspiciis praesidentis* Oct 2009
Jan 2006: *Diploma thesis:* „Numerical simulation of contact problems with Coulomb friction“. JKU Linz, supervisor Prof. W. Zulehner
Oct 2001 – Mar 2006: Studies of Technical Mathematics (Industrial Mathematics) at JKU Linz, with distinction
2001: Matura, with distinction
1993 - 2001: BRG Landwiedstr., Linz, Austria

Professional experience:

since Aug 2010 Associate Professor/Assistant Professor/University Assistant at Institute of Technical Mechanics, JKU
Apr 2011 – May 2012 maternity leave due to birth of daughter Johanna
Aug 2012 – Nov 2012 research leave due to position as Senior Researcher at the Austrian Center of Mechatronics
May 2013 – Jul 2015 maternity leave due to birth of son Thomas
Jan - Jul 2010: Senior Researcher am Linz Center of Mechatronics GmbH, Business Unit 4
Apr – Dec 2009: Project Assistant at at Institute of Technical Mechanics, JKU, Head: Prof. H. Irschik.
Jan – Mar 2009: Research Assistant at “Direct Fields Problems” group at Johann Radon Institute for Computational and Applied Mathematics (RICAM), Austrian Academy of Sciences, Head: Prof. U. Langer.
Apr 2006 – Dec 2008: Research Assistant at START Project Y-192, “3D hp Finite Elements: Fast Solvers and Adaptivity”, at RICAM, Austrian Academy of Sciences, Head: Prof. J. Schöberl.

Scientific visits:

Aug 31 – Oct 2, 2006: scientific visit to Prof. R. Stenberg, Technical University of Helsinki, Finland
2007: Project “Parallel NgSolve” with Schlumberger, Boston, USA, on the parallelization of the software package Netgen/NgSolve, visit to Boston Nov. 2007.
Oct 30 – Nov 30, 2007: Prof. P. Monk, University of Delaware, USA
Aug 1 – Nov 30, 2012: Austrian Center of Mechatronics GmbH, Linz

Awards:

2006 Würdigungspreis des Bundesministeriums für Bildung, Wissenschaft und Kultur
2009 Promotion sub auspiciis praesidentis rei publicae
2009 Würdigungspreis des Bundesministeriums für Wissenschaft und Forschung

Granted research project:

Oct 2017 – Feb 2020 LIT-Project „Mixed Finite Elements for Smart Materials and Structures” (MiFESMS), project number LIT-2016-2-YOU-005, co-supervision of PhD student DI Martin Meindlhumer

Teaching experience (lectures and exercises given at JKU Linz):

- “Mechanik Intelligenter Konstruktionen/Mechanics of Smart Structures”:
 - special lecture summer term 2017 (VO, 3 ECTS),
 - special lecture + exercises winter term 2018/19, 2020/21 (VO, 3 ECTS + UE, 1.25 ECTS)
- “Technische Mechanik 1/Engineering Mechanics 1”:
 - Repeated Exercises (UE, 2.5 ECTS)
- “Technische Mechanik 2/Engineering Mechanics 2”:
 - Repeated Exercises (UE, 2.5 ECTS)
- “Höhere Computergestützte Methoden/Advanced Computational Methods in Mechanics”:
 - Exercises summer term 2018, 2020 (UE, 1.25 ECTS)

Additionally repeated assistance to Prof. Irschik, Prof. Krommer in lectures “Technische Mechanik 1+2/Engineering Mechanics 1+2”