

# Curriculum vitae

## Personal Information

**FIRST NAME / SURNAME** Hartmut Monien  
**ADDRESS** Schloßstraße 37, 53115 Bonn  
**TEL** +49 228 733247  
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**EMAIL** monien@th.physik.uni-bonn.de

**NATIONALITY** German

## Education and Career

**DATES** October 1995 - present  
**POSITION** Full Professor  
**EMPLOYER** University Bonn

**DATES** 1993 - 1995  
**POSITION** Assistant  
**EMPLOYER** ETH Zürich

**DATES** 1990 - 1993  
**POSITION** Postdoctoral Fellow  
**EMPLOYER** KITP Santa Barbara

**DATES** 1987 - 1990  
**POSITION** Postdoctoral Fellow / Visiting Assistant Professor  
**EMPLOYER** Joint appointment with the University of Illinois at Urbana-Champaign and NORDITA (Copenhagen)

**DATES** 1985 - 1987  
**QUALIFICATION AWARDED** Doctoral Degree of Natural Sciences  
**INSTITUTION** University Hamburg  
**TITLE** *Transport and equilibrium properties of unconventional superconductors*

# Curriculum vitae

**DATES** 1982 - 1985  
**QUALIFICATION AWARDED** Diplom of Physics  
**INSTITUTION** University Hamburg

**DATES** 1979 - 1982  
**QUALIFICATION AWARDED** Vordiplom Physics  
**INSTITUTION** Technical University Hannover

## Recent Academic Visits

**TITLE** *Dessins d'enfants and modular curves associated to the sporadic group Co3 and Janko2*  
**DATES** 11/5/2019  
**INSTITUTION** EPFL Lausanne, Switzerland

**TITLE** Conference on „Integrability, Geometry and Moduli“  
**DATES** 7/29/2019 - 08/02/2019  
**INSTITUTION** Max Planck Institute for Mathematics, Bonn

**TITLE** Bethe Forum Number Theoretic Methods in Quantum Physics  
**DATES** 7/15/2020 - 7/19/2020  
**INSTITUTION** Bethe Center for Theoretical Physics, Bonn, Germany

**TITLE** Conference Arithmetic, geometry and modular forms  
**DATES** 06/17/2019 - 06/21/2019  
**INSTITUTION** ETH Zürich, Switzerland

# Curriculum vitae

- TITLE** LFANT seminar: *Inverse Galois theory, modular forms and Belyi maps the sporadic groups Janko J<sub>2</sub> and the Conway group Co<sub>0</sub>*
- DATES** 5/21/2019
- INSTITUTION** Université de Bordeaux, Institute de Mathématiques de Bordeaux et Laboratoire Bordelais de Recherche en Informatique
- TITLE** Conference on Polynomial Computer Algebra: *Inverse Galois theory and modular curves*
- DATES** 04/15/2019 - 04/20/2019
- INSTITUTION** Euler International Mathematical Institute, St. Petersburg, Russian Federation
- TITLE** Mathematics Colloquium: *Inverse Galois theory: New results for sporadic groups*
- DATES** 4/1/2019 - 4/3/2019
- INSTITUTION** Charles University Prague
- TITLE** Workshop Quantum Dynamics, Transport, and Exotic Orders: *Strolling among Spins and Strong Correlations*
- DATES** 3/28/2019 - 03/29/2019
- INSTITUTION** Leibniz Institute for Solid State and Material Research Dresden, IFW Dresden, Germany

## Extended Academic Visits

- DATES** 2005
- POSITION** Visiting Professor
- INSTITUTION** National Center for Theoretical Sciences, Taiwan
- DATES** 2/23/2000 - 08/15/2000
- POSITION** JSPS Fellow
- INSTITUTION** Japanese Society for Promotion of Science  
Yukawa Institute, Kyoto University, Japan

# Curriculum vitae

**DATES** 1987 - 1995  
**POSITION** Visiting Fellow  
**INSTITUTION** Los Alamos National Laboratory

**DATES** 1991  
**POSITION** Consultant  
**INSTITUTION** AT&T Bell Labs, Murray Hill, NJ

## Funding

**PROGRAM** DFG Priority Program 1073  
**POSITION** Principal Investigator  
**TITLE** Pseudo gaps and fluctuations in quasi-one dimensional metals

**PROGRAM** DFG Collaborative Research Centers 608  
**POSITION** Principal investigator and co-founder  
**TITLE** Complex transition metal compounds with spin and charge degrees of freedom and disorder

**PROGRAM** DAAD NSF Collaborative grant  
University Bonn - Columbia University  
**POSITION** Principal Investigator

**Publications** 6116 citations, h-index 36 (source google scholar)  
citations as of February 25, 2020

## Notable Publications

**AUTHOR(S)** Millis, A. J.; Monien, H; Pines, D.  
**TITLE** Phenomenological model of nuclear-relaxation in the normal state of  $\text{YBa}_2\text{Cu}_3\text{O}_7$   
**PUBLISHED** Phys. Rev. B **42** (1), 167-178, Part A (1990)  
**TIMES CITED** 1201

## Curriculum vitae

<b>AUTHOR(S)</b>	Freericks, J. K.; Monien, H
<b>TITLE</b>	Strong-coupling expansions for the pure and disordered Bose-Hubbard model
<b>PUBLISHED</b>	Phys. Rev. B <b>53</b> (5), 2691-2700 (1996)
<b>TIMES CITED</b>	432
<b>AUTHOR(S)</b>	Baym, G; Monien, H; Pethick, CJ; et al.
<b>TITLE</b>	Transverse interactions and transport in relativistic quark-gluon and electromagnetic plasmas
<b>PUBLISHED</b>	Phys. Rev. Letters <b>64</b> (16), 1867-1870 (1990)
<b>TIMES CITED</b>	352
<b>AUTHOR(S)</b>	Kühner, TD; Monien, H.
<b>TITLE</b>	Phases of the one-dimensional Bose-Hubbard model
<b>PUBLISHED</b>	Phys. Rev. B <b>58</b> (22), 14741-14744 (1998)
<b>TIMES CITED</b>	318
<b>AUTHOR(S)</b>	Millis, AJ; Monien, H
<b>TITLE</b>	Spin gaps and spin dynamics in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ and $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
<b>PUBLISHED</b>	Phys. Rev. Letters <b>70</b> (18), 2810-2813 (1993)
<b>TIMES CITED</b>	263
<b>AUTHOR(S)</b>	Monien, H; Pines, D; Takigawa, M.
<b>TITLE</b>	One-dimensional Bose-Hubbard Model with nearest-neighbor interaction
<b>PUBLISHED</b>	Phys. Rev. B <b>61</b> (18), 12474-12489 (2000)
<b>TIMES CITED</b>	238
<b>AUTHOR(S)</b>	Freericks, J.K.; Monien, H.
<b>TITLE</b>	Phase-diagram of the Bose-Hubbard Model
<b>PUBLISHED</b>	Europhysics Letters <b>26</b> (7) 545 - 550 (1994)
<b>TIMES CITED</b>	238

## Curriculum vitae

<b>AUTHOR(S)</b>	Elstner, N.; Monien, H.
<b>TITLE</b>	Dynamics and thermodynamics of the Bose-Hubbard model
<b>PUBLISHED</b>	Phys. Rev. B <b>59</b> (19), 12184-12187 (1999)
<b>TIMES CITED</b>	201
<b>AUTHOR(S)</b>	Monien, H.; Monthoux P; Pines D.
<b>TITLE</b>	Application of antiferromagnetic-Fermi-liquid theory to NMR experiments in $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$
<b>PUBLISHED</b>	Phys. Rev. B <b>43</b> (19), 275-287 (1991)
<b>TIMES CITED</b>	151
<b>AUTHOR(S)</b>	Littlewood, P.B.; Zaanen, J.; Aeppli, G; Monien, H.
<b>TITLE</b>	Spin fluctuations in a 2-dimensional marginal Fermi liquid
<b>PUBLISHED</b>	Phys. Rev. B <b>48</b> (1), 487-498 (1993)
<b>TIMES CITED</b>	121