

# Curriculum Vitae

## Dr.-Ing. Wolfgang Kellerer, Professor



### Personal Data

Date of birth: July 13, 1970  
Place of birth: Fürstenfeldbruck, Germany  
Family status: married, 3 children  
Nationality: German  
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### Scientific Career

since 07/2012 Professor (W3) and head of the Chair of Communication Networks at TUM,  
Department of Electrical and Computer Engineering (ECE)  
(Elektrotechnik und Informationstechnik)  
since 10/2020 Dean of Studies of the ECE Department at TUM  
2002 – 2012 DOCOMO Communications Laboratories Europe GmbH  
European research institute of the Japanese mobile operator NTT DOCOMO  
Last position: Director of the research unit for communications engineering  
and mobile networks (ca. 30 staff members)  
2003 – 2012 Adjunct lecturer at TUM on „Advanced Network Architectures and Services“  
2002 Dr.-Ing. (PhD degree), Electrical and Computer Engineering, TUM  
2001 Visiting Scholar at Stanford University, CA, USA  
1996 – 2001 Member of the scientific and teaching staff, Chair of Communication Networks, TUM  
1990 – 1995 Master- and Bachelor-level studies in ECE at TUM (degree: Dipl.-Ing.)

### Scientific Awards, Editorials and Selected Activities

since 2021 Co-coordinator of “6G-life” (BMBF, 25 Mio EUR)  
since 2021 Coordinator of the “6G Future Lab Bavaria” (StMWi, 4 Mio EUR)  
since 2021 Core Member Munich Data Science Institute (MDSI)  
since 2020 Scientific Chair of “Thinknet 6G” (StMWi)  
2020 Lecturer Award for Outstanding Teaching in 2020 of the TUM ECE department  
2020 VDE “Ehrenurkunde 2020” awarded for exceptional voluntary service for VDE ITG  
since 2018 Guest Editor-in-Chief for IEEE Transactions on Network and Service Management  
(TNSM), Special Issues (2018, 2019, 2021, 2022) on Softwarized Networks  
2018-20 Scientific Director TUM/LMU Center for Digital Technology and Management (CDTM)  
since 2018 Member of the Munich Institute for Robotics and Machine Intelligence (MIRMI)  
since 2018 Member of the Scientific Advisory Board Max-Planck-Institute for Informatics, Saarbr.  
Since 2018 Area Editor Network Virtualization and Member of the Editorial Board IEEE COMST  
since 2018 Member of the Editorial Board IEEE TNSM

2018-21	Member of the Editorial Board IEEE Networking Letters
since 2017	Member of the Wissenschaftlicher Arbeitskreis für Regulierungsfragen der Bundesnetzagentur (German Federal Network Agency)
2015 - 21	ERC Consolidator Grant FlexNets „Quantifying Flexibility in Communication Networks“
2015	DFG SPP „Cyber Physical Networking“ (Co-author of the DFG SPPs)
2015-20	Member of the Advisory Board (Kuratorium) of Fraunhofer FOKUS, Berlin
since 2013	Member of the Board of Directors of LMU/TUM CDTM
since 2012	Member of the VDE/ITG Fachausschuss 5.2 Communication Networks
2011	DOCOMO Euro-Labs Company Award 2011
since 2009	Member of the GI/ITG Fachausschuss Kommunikation und Verteilte Systeme
2009	IETF RFC RFC 5631: Session Initiation Protocol (SIP) Session Mobility
2008	ITG-Award 2008 für Outstanding Publication (VDE ITG)
since 2002	TPC member in more than 50 program committees of international conferences, incl. ACM CoNEXT, IEEE INFOCOM, IEEE P2P, IEEE ICC, IEEE Globecom, ACM Multimedia, ITC
since 2001	more than 40 patent applications, of which 37 with patent awarded already

#### 10 Selected Publications (Google Scholar H-Index: 52)

1. W. Kellerer, P. Kalmbach, A. Blenk, A. Basta, M. Reisslein, S. Schmid. Adaptable and Data-Driven Softwarized Networks: Review, Opportunities and Challenges. Proceedings of the IEEE 107 (4), 2019, 711-731.
2. V. Bajpai, A. Brunstrom, A. Feldmann, W. Kellerer, A. Pras, H. Schulzrinne, G. Smaragdakis, M. Wählisch, K. Wehrle. The Dagstuhl Beginners Guide to Reproducibility for Experimental Networking Research. ACM SIGCOMM Computer Communication Review 49 (1), 2019, 24-30 (ACM SIGCOMM 2019 Best of CCR Award).
3. M. Gürsu, M. Vilgelm, A. Martinez Alba, M. Berioli, W. Kellerer. Admission Control Based Traffic-Agnostic Delay-Constrained Random Access (AC/DC-RA) for M2M Communication. IEEE Transactions on Wireless Communications (Volume: 18 , Issue: 5), 2019, 2858 – 2871.
4. A. Basta, A. Blenk, K. Hoffmann, H. Morper, M. Hoffmann, W. Kellerer: Towards a Cost Optimal Design for a 5G Mobile Core Network based on SDN and NFV. IEEE Transactions on Network and Service Management (TNSM). 2017. (awarded as IEEE ComSoc Selected Publication 2020)
5. AS. Thyagaturu, A. Mercian, MP. McGarry, M. Reisslein, W. Kellerer. Software Defined Optical Networks (SDONs): A comprehensive survey, IEEE Communication Surveys & Tutorials 18 (4), 2738-2786, 2016.
6. J. Guck, M. Reisslein, W. Kellerer. Function Split between Delay-Constrained Routing and Resource Allocation for Centrally Managed QoS in Industrial Networks. IEEE Transactions on Industrial Informatics. 2016; 12(6): 2050 - 2061.
7. A Blenk, A Basta, M Reisslein, W Kellerer Survey on network virtualization hypervisors for software defined networking, IEEE Communications Surveys & Tutorials 18 (1), 655-685, 2015.
8. K. Römer, B. Ostermaier, F. Mattern, M. Fahrmaier, W. Kellerer. Real-Time Search for Real-World Entities: A Survey. Proceedings of the IEEE 98(11): 1887 - 1902.
9. R. Shacham, H. Schulzrinne, S. Thakolsri, W. Kellerer. Ubiquitous Device Personalization: The Next Generation of IP Telephony. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP). 2007; 3(2): Article No. 12.
10. S. Khan, M. Sgroi, Y. Peng, E. Steinbach, W. Kellerer. Application-driven Cross Layer Optimization for Video Streaming over Wireless Networks”. IEEE Communications Mag. 2006; 44(1): 122-130.