

## Prof. Dr. Thomas Müller - Curriculum Vitae

Born January 16<sup>th</sup>, 1953, in Wuppertal, Germany  
Married, four children

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### Scientific CV

Study of Physics Diploma in Physics, Bonn University (magna cum laude) ..... 1979  
PhD in Physics, Bonn University  
Subject: "Particle Production in Proton-Antiproton-Reactions at 540 GeV  
Center of Mass Energy" (summa cum laude) ..... 1983

Habilitation Venia Legendi, Bonn University  
Subject: "Production Properties of the Intermediate Vector Bosons  
W and Z at the CERN P anti-P Collider" ..... 1988

Employment CERN Fellow, (UA1-Experiment)..... 1984-1985  
CERN Research Staff, (UA1-Experiment) ..... 1986-1989  
Assistant Professor, University of California, Los Angeles (UCLA) . 1990-1993  
SCC Fellow (SDC Experiment)..... 1991-1993  
Full Professor, UCLA ..... 1995-1996  
Professor and Chair, Karlsruhe University ..... since 1995

**Boards**

University Member of the Legislative Assembly UCLA..... 1992-1994  
Head of *Institut für Experimentelle Kernphysik* ..... since 1995  
Deputy Dean ..... 2000-2002  
Dean ..... 2004-2006  
Spokesperson of the Karlsruhe Centre of Excellence CETA..... 2003-2007

Collaborations Co-founder and chair of US-CMS Collaboration ..... 1994-1996  
Spokesman of the German CMS Collaboration ..... 1998-2003  
Co-founder and member of CMS Management Board ..... 1994-2007  
Member of CMS Finance Board and of the RRB ..... 1998-2003

Research Member of LEP Committee ..... 2000-2001  
Member of ECFA ..... since 2005  
Member of RECFA..... since 2010  
Co-editor of Springer "Tracts in Modern Physics" ..... since 1996  
Member of the Scientific Review Board of the  
German Ministry of Science ("Gutachterausschuss") ..... 1999-2008  
Chair of the BMBF Gutachterausschuss..... 2005-2008  
Member of IUPAP C11 ..... since 2009  
Member of EUDET-Advisory Board ..... since 2005  
Chair of EUDET-Advisory Board..... since 2009  
Member of Advisory Board of the Austrian Academy of Science ... since 2008

## Research Profile

Physics at hadron colliders. properties of the Top quark, search for the Higgs boson, search for anomalies in the EWK interaction, search for physics beyond the Standard Model. Development and construction of detectors, focus on calorimeters and tracking detectors.

Participation in the following experiments:

R703 (CERN ISR), UA5 und UA1 (CERN p-pbar Collider), ICARUS (Grand Sasso), CDF (FNAL Tevatron), SDC (SSC), APEX (FNAL Antiproton Source), CMS (CERN LHC)

## Important Publications

[PRODUCTION OF PHOTONS AND SEARCH FOR CENTAURO EVENTS AT THE SPS COLLIDER.](#)

By UA5 Collaboration, Phys.Lett.B115:71,1982.

[A MICROVERTEX DETECTOR FOR EXPERIMENT UA1 AT THE CERN S p anti-p S COLLIDER.](#)

By L. Bassi, et al., Nucl.Instrum.Meth.A252:387-391,1986.

[PRODUCTION PROPERTIES OF THE INTERMEDIATE VECTOR BOSONS W AND Z AT THE CERN p anti-p COLLIDER.](#)

By Th. Muller, Fortschr.Phys.37:339,1989.

[PERFORMANCE OF A URANIUM/TETRAMETHYLPENTANE ELECTROMAGNETIC CALORIMETER.](#)

By A. Gonidec, et al., Nucl.Instrum.Meth.A265:303-318,1988.

[SEARCH FOR ANTI-PROTON DECAY AT THE FERMILAB ANTI-PROTON ACCUMULATOR.](#)

By T861 Collaboration, Phys.Rev.Lett.72:1596-1599,1994.

[MEASUREMENT OF W-PHOTON COUPLINGS WITH CDF IN P-ANTI-P COLLISIONS AT /s=1.8TEV.](#)

By CDF Collaboration, Phys.Rev.Lett.74:1936-1940,1995.

[LIMITS ON Z-PHOTON COUPLINGS FROM P-ANTI-P INTERACTIONS AT /S = 1.8 TEV.](#)

By CDF Collaboration, Phys.Rev.Lett.74:1941-1945,1995.

[A DETECTOR TO SEARCH FOR ANTI-PROTON DECAY AT THE FERMILAB ANTI-PROTON ACCUMULATOR.](#)

By APEX Collaboration, Nucl.Instrum.Meth.A411:210-222,1998.

[THE CMS TRACKER AND ITS PERFORMANCE.](#)

By CMS Collaboration, Nucl.Instrum.Meth.A408:119-127,1998.

[HADRON COLLIDER PHYSICS - PROC. 14th TOPICAL CONFERENCE, HCP 2002, KARLSRUHE, GERMANY, 2002.](#)

By M. Erdmann (ed.) & Th. Muller (ed.). Berlin, Germany: Springer (2003) 527.

[PERFORMANCE TEST OF A MICRO-PATTERN STEREO DETECTOR WITH TWO GAS ELECTRON MULTIPLIERS.](#)

By T. Barvich, et al., Nucl.Instrum.Meth.A478:187-189,2002.

[DEVELOPMENT AND STUDIES OF A TIME PROJECTION CHAMBER WITH GEMs.](#)

By J. Kaminski, et al., Nucl.Instrum.Meth.A535:201-205,2004.

[SUMMARY OF THE CMS POTENTIAL FOR THE HIGGS BOSON DISCOVERY.](#)

By S. Abdullin, et al., Eur.Phys.J.C39S2:41-61,2005.

[SEARCH FOR ELECTROWEAK SINGLE TOP QUARK PRODUCTION IN P-ANTI-P COLLISIONS AT /S=1.96-TEV.](#)

By CDF Collaboration, Phys.Rev.D71:012005,2005.

... plus more in Spires

## **Memberships**

American Physical Society

Deutsche Physikalische Gesellschaft

Deutscher Hochschulverband

Verein Deutsche Sprache

Karlsruher Universitätsgesellschaft

Verein der Freunde und Förderer der Universität Bonn

Verein der Freunde und Förderer des Forschungszentrum Karlsruhe