NAME: Ralf W. Gothe
AFFILIATION: University of South Carolina
DEPARTMENT: Physics and Astronomy

PHONE: 803-777-9025
E-MAIL: gothe@sc.edu
HOMEPAGE: www.physics.sc.edu/~gothe

PROFESSIONAL PREPARATION

Institution/Location	Field of Study	Year(s)	Degree
University of Bonn, Germany	Physics	1998	Habilitation
University of Mainz, Germany	Physics	1990	Ph.D.
University of Mainz, Germany	Physics	1987	Dilplom Arbeit (MS)

ACADEMIC POSITIONS

2018-2021 Chair of the Department of Physics and Astronomy, University of South Carolina, Columbia, SC
2005-Present Professor of Physics (Tenured), University of South Carolina, Columbia, SC
2002-2005 Associate Professor of Physics, University of South Carolina, Columbia, SC
1998-2002 Associate Professor of Physics, University of Bonn, Germany
2001-2002 Lecturer (Concurrent Appointment), Fachhochschule Bonn-Rhein-Sieg, Germany
1994-1998 Assistant Professor of Physics, University of Bonn, Germany
1991-1994 Assistant Professor of Physics, University of Bonn, Germany
1990-1991 Research Associate, University of Bonn, Germany
1987-1990 Graduate Research and Teaching Assistantship, University of Mainz, Germany
1984-1987 Graduate Teaching Assistantships, University of Mainz, Germany

AFFILIATIONS AND COLLABORATIONS

Member of the MUSE Collaboration, PSI, Villingen, Switzerland 2012-Present
Member of the CLAS Collaboration, CEBAF/TJNAF, Newport News, VA 2002-Present
Member of the CLAS CBELSA Collaboration, ELSA, Bonn, Germany 1996-2012
Visiting Scientist, Massachusetts Institute of Technology, Cambridge, MA 1994
Experiment Leader of the ELAN Collaboration, ELSA, Bonn, Germany 1990-2007

PUBLICATION LIST (Six selected publications out of 281 refereed papers)

1) *Evidence for the N'(1720)3/2$^+$ Nucleon Resonance from Combined Studies of CLAS $\pi^+\pi^-p$ Photo- and Electroproduction Data*, V.I. Mokeev *et al.*, Phys. Lett. **B 805** (2020) 135457, 1-8 (lead author)
2) *Measurements of $\gamma_v p \rightarrow p'\pi^+\pi^-$ Cross Section with the CLAS Detector for 0.4 GeV^2 < Q^2 < 1.0 GeV^2 and 1.3 GeV < W < 1.825 GeV*, G. Fedotov *et al.* (The CLAS Collaboration), Phys. Rev. **C 98** (2018) 025203, 1-19 (lead author)
3) *Measurements of $ep \rightarrow e'\pi^+\pi^-p'$ cross sections with CLAS at 1.40 GeV < W < 2.0 GeV and 2.0 GeV^2 < Q^2 < 5.0 GeV^2*, E. L. Isupov *et al.* (The CLAS Collaboration), Phys. Rev. **C 96** (20 17) 025209, 1-19 (lead author)
4) *Impact of the $\gamma_v NN^*$ Electrocoupling Parameters at High Photon Virtualities and Preliminary Cross Sections off the Neutron*, R.W. Gothe and Y. Tian, Few-Body Syst. **57** (2016) **10**, 917-924 (lead author)
5) *New results from the studies of the N(1440)1/2$^+$, N(1520)3/2$^-$, and Δ(1620)1/2$^-$ resonances in exclusive $ep \rightarrow e'p'\pi^+\pi^-$ electroproduction with the CLAS detector*, V. I. Mokeev *et al.*, Phys. Rev. **C 93**, 025206 (2016) 1-25 (lead author)
6) *Studies of Nucleon Resonance Structure in Exclusive Meson Electroproduction*, I.G. Aznauryan *et al.*, Int. J. Mod. Phys. **E 22** (2013) 1330015, 1-119 (chief editor, all-time Top 10 most cited review article)

INVITED PRSENTATIONS (Six recent conference opening presentations out of 157 invited presentation)

1) *Overview of the N* Program*, Quark Hadron Duality Workshop: Probing the Transition from Free to Confined Quarks, James Madison University, Harrisonburg, VA, September 23-25, 2018
2) *QCD where it Matters*, QCD Downunder 2017, Cairns, Australia, July 10-14, 2017
3) *N* Structure of Free and Quasi-Free Electroexcited Nucleons*, VI. International Workshop on Non-Perturbative Aspects of Quantum Field Theories: QCD and Hadron Physics, Tuxtla Gutiérrez, Mexico, April 24-28, 2017
4) *Dressed Quark versus Bare Quark Structure of Baryons and nonperturbative QCD*, NPQCD 2016, Third Nonperturbative QCD Workshop on Nonperturbative Aspects of QCD and Hadro-Particle Physics, Sevilla, Spain, October 17-21, 2016
5) *Nucleon Resonances and their Structure*, MENU 2016, The 14th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon, Kyoto, Japan, July 25-30, 2016
6) *Electroexcitation of Nucleon Resonances*, Baryons 2016, International Conference on the Structure of Baryons, Tallahassee, Florida, May 16-20, 2016

MAJOR RESEARCH SUPERVISOR OF UNDERGRADUATE STUDENTS (Total number in the last ten years: 22)

Tatyana Rogers (Physics), Sebastian Palecki (Physics), Rajshekhar Sarkar (Engineering), Graeme Rock (Physics), Cameron Nickle (Physics), James Thomason (Physics), Mark Mayers (Physics), Reid Harris (Mathematics), Gerard Anderson (Statistics), Jesse Anderson (Physics), Alexander Auerback (Mathematics), Steven Banks (Physics), Kristina Ethridge (Biology), Alexander Haag (Engineering), Tyler Hernandez (Chemistry), Phillip Keck (Physics), David Lucas (Engineering), Nolan Miller (Physics), Roberto Rienstra (Physics), Felician Stratmann (Finance), Matthew Williamson (Engineering), Robert Hedrick (Physics)

MAJOR ADVISOR TO Ph.D. CANDIDATES OR TO TERMINAL DEGREE CANDIDATES (Total number: 38)

Students ([1] Senior, [2] Master's, and [3] Ph.D. Thesis):
Krishna Neupane[3] (2017-Present), Christopher A. McLauchlin[3] (2016-Present), Nicholas S. Tyler[3] (2013-2021), Iuliia Skorodumina[3] (2012-2021), Gary D. Hollis[3] (2011-2020), Saptaparnee Chaudhuri[2] (2011-2014), Arjun Trivedi[3] (2010-2016), Robert Steinman[2] (2008-2010), Ye Tian[3] (2008-2016), Matthew Enright[1] (2007-2008), Evans Phelps[3] (2006-2017), Haiyun Lu[3] (2003-2010), Zhiwen Zhao[3] (2003-2010), Lewis Graham[2,3] (2003-2012), Ralf Ewald[2] (2001-2002), Michael Konrad[2,3] (2000-2006), Stefan K. Höffgen[2,3] (1998-2007), René Bantes[3] (1997-2003), Jörn Langheinrich[3] (1995-1999), Sean Patrick Ningen[2] (1994-1995), Betina Bantes[2,3] (1994-2003), Henning Brunhöber[2,3] (1994-2001), Helmut Hainer[3] (1994-2000), Patrick Maschke[2,3] (1994-2001), Martin Tramm[2] (1993-1995), Detlef Jakob[2,3] (1992-1996), Christian Kunz[2] (1991-1993), Dirk Wacker[2,3] (1991-1998)

POSTDOCTORAL FELLOWS (Total number: 16)

Iuliia Skorodumina (2021-Present), Gary D. Hollis (2020-Present), Arjun Trivedi (2016-2018), Haiyun Lu (2013-2016), Gleb Fedotov (2009-2016), Svyatoslav Tkachenko (2010-2011), Simona Malace (2007-2010), Kijun Park (2005-2009), Rakhsha Nasseripour (2004-2007), Betina Bantes (2003-2007), Henning Brunhöber (2001-2002), Patrick Maschke (2001-2002), Helmut Hainer (2000), Jörn Langheinrich (1999-2006), Dirk Wacker (1998), Detlef Jakob (1996)

OTHER ACTIVITIES/ACCOMPLISHMENTS (last six years)

Future Planning Activities: SURA JSA Programs Committee, Editor of the ECT* 2015 and NSTAR 2017 proceedings, the INT-16-62W 2016 summary paper, and a review paper on the Status and Outlook on the Nucleon Resonance Structure program, Contributor to the White Paper and invited Presenter at the QCD Town Hall meeting in preparation for the last NSAC Long Range Plan 2015, First Experiment Analysis Review (FEAR) Committee, First Experiment Hadron Structure Group Chair, Technical Working Group Leader for ToF12 at Jefferson Lab.
Information Exchange Activities: Organizer of the EmNN* 2012, ECT* 2015, and INT 2016 workshops and host of the NSTAR 2017 conference, Advisor and Convener at 32 international conferences, Presenter of 44 invited talks (13 times as conference opening or closing speaker), Author of 79 refereed publications 19 times as Lead Author, Reviewer of more than100 research and funding proposals and publications, weekly meetings of the N* analysis and Hadron Structure groups.
Base Equipment Development: PI of the USC effort to implement a new forward time-of-flight detector with unprecedented time resolution into CLAS12 at Jefferson Lab. Co-PI of the MUSE scintillation detector design and construction effort.
Outreach and Mentoring Activities: Judge at the SCAS and the USC Science & Engineering Fair, Organizer of Midway Physics Day, Mentor of Physics Day at Six Flags and at Carowinds, SCAMP, SEAGAP, STEM, GAANN, Goldwater, Marshall, Gates Cambridge, McNair, Carolina Scholar, and K-12 Visiting Students, as well as Research Mentor of 22 Undergraduate Students.
International Research Experience for Students: Organizer of the USC Summer Academy on Non-Perturbative Physics, Lecturer at the HUGS graduate summer school and the Gordon conference.

HONORS AND AWARDS

2020 All Time Top 10 Most Cited Review Article, World Scientific: International Journal of Modern Physics E
2020 Pearce Faculty Fellow, awarded by the Dean of the South Carolina Honors College
2017 Michael J. Mungo Undergraduate Teaching Award, awarded by the President of the University of South Carolina
2017 Distinguished Professor, awarded by the Mexican Academy of Science
2014 Honors College Faculty Fellow, awarded by the Dean of the South Carolina Honors College
2013 Russell Research Award for Science, Mathematics, and Engineering, awarded by the Provost of USC
2011 ADLP Fellow, Academic Leadership Development Program, SECAC, awarded by the Provost of USC
2008 Michael J. Mungo Graduate Teaching Award, USC, awarded by the President of the University of South Carolina
2007 Vice President for Student Services, in recognition of dedication and inspiring efforts in graduate student teaching, USC
2006 Office of Student Government & Cultural Exchange Association, in recognition dedication to international students, USC
2006 College of Science and Mathematics, for outstanding accomplishments in teaching, research, and service, USC
1983 Member of the German National Merit Foundation, in recognition of scholarly activities and abilities, lifetime