

# Curriculum Vitae: Ralf Rapp

## **Education and Training**

High School: “Abitur” 1987, average 1.0 (best possible), Koblenz-Karthause (Germany)  
Undergraduate: Diploma (M.Sc.) in Physics, University of Bonn (Germany), 1993  
Graduate: Research Center Jülich (Germany), Univ. of Illinois (Urbana-Champaign);  
PhD Theoretical Nuclear/Hadron Physics, University of Bonn, 1996  
Postdoctoral: Research Center Jülich, Theo. Nuclear/Hadron Physics, 1996;  
SUNY at Stony Brook, Theo. Nuclear/Hadron/Heavy-Ion Physics, 1996-1999

## **Research and Professional Experience**

1999-2001 Research Scientist, SUNY Stony Brook  
2001-2002 Research Assistant Professor, SUNY Stony Brook  
2002-2003 Research Assistant Professor, NORDITA (Copenhagen, Denmark)  
2003-2006 Tenure Track Assistant Professor, Texas A&M University (College Station)  
2006-2010 Associate Professor with Tenure, TAMU (College Station)  
since 2010 Full Professor, TAMU (College Station)

## **Honors and Awards**

1991 CERN Summer Student Fellowship  
1994,1995 2 grad. student research fellowships (German Academic Ex. Serv., DAAD)  
at Univ. of Illinois at Urbana-Champaign  
1996-1999 Feodor-Lynen Fellowship (Alexander von Humboldt Foundation, Germany)  
2003-2006 Adjunct Professor, SUNY Stony Brook  
2004 U.S. National Science Foundation CAREER Award  
2007 Friedrich Wilhelm Bessel Research Award (Humboldt Foundation)  
2009 Robert S. Hyer Award by the Texas Section of the American Physical Society  
2014 Fellow of the American Physical Society

## **Funding**

Host for Feodor-Lynen Fellow H. van Hees (Humboldt Foundation), “*Theoretical Studies of Hadronic and Partonic Matter in Heavy-Ion Experiments*”, 2004-2005  
U.S. National Science Foundation CAREER grant (\$562425 total, single PI), “*CAREER: Spectral Properties of Hot and Dense QCD Matter*”, 2004-2009  
Faculty mentor on TAMU Cyclotron NSF-REU grant, “*REU site: Nuclear and Particle Science at Texas A&M University*”, 2004-date  
Host for Fulbright Fellow D. Cabrera (through Spanish Minister of Edu.+Sci.), “*Mesons at Finite Density and Temperature and Applications to Heavy-Ion Collisions*”, 2005-2007  
Supplement to US NSF CAREER grant (\$40000 total, single PI), 2009-2010  
US NSF standard grant on “*Electromagnetic and Heavy-Quark Probes of QCD Matter*” (\$450000, single PI), 2010-2013  
US NSF continuing grant on “*QCD Matter Studies with Heavy Quarks and Dileptons*” (\$432000, single PI), 2013-2016  
TAMU-Tsinghua/NSFC collaborative grant on “*Heavy Quarkonium Production in Heavy-Ion Collisions*” (\$25000+RMB50000 with P. Zhuang), 2014-2015  
US NSF continuing grant on “*Radiation and Transport in QCD Matter*” (\$12400 per year, single PI), 2016-2019

## Publications and Presentations

- ca. 100+75 articles in scientific journals (refereed) + conference proceedings (mostly refereed)
- ca. 11200/9500 citations on all/published scientific articles (Inspire database), h-index 52/50
- ca. 125 invited talks and lectures at international conferences, workshops and schools
- ca. 95 colloquia, seminars and contributed conference talks

## Three Key Publications:

1. R. Rapp, T. Schäfer, E.V. Shuryak and M. Velkovsky, *Diquark Bose Condensates in High Density Matter and Instantons*, Phys. Rev. Lett. **81**, 53-56 (1998) (ca. 940 citations)
2. R. Rapp and J. Wambach, *Chiral Symmetry Restoration and Dileptons in Relativistic Heavy-Ion Collisions*, Adv. Nucl. Phys. **25**, 1-205 (2000) (ca. 710 citations)
3. H. van Hees, V. Greco and R. Rapp, *Heavy-Quark Probes of the Quark-Gluon Plasma at RHIC*, Phys. Rev. C **73**, 034913 (2006) (ca. 310 citations)

## Classroom Teaching

- 1999-2002 course instr. of 3 undergrad. physics classes + recitations at SUNY Stony Brook
- since 2003 course instructor of 24 physics under/graduate classes at Texas A&M to date

## Selected Synergistic Activities

- Member of German (DPG, since 1993) and American (APS, since 1993) Physical Society, Texas Section of APS (TSAPS, since 2007)
- Referee for scientific journals: Phys. Rev. Lett., Phys. Rev. C/D, Rev. Mod. Phys., Phys. Lett. B, Nucl. Phys. A, Eur. Phys. J. A/C, J. Phys. G, Prog. Part. Nucl. Phys., Europhys. Lett., Can. J. Phys., Acta Phys. Pol., Braz. J. Phys., Int. J. Mod. Phys. A/E, J. High-Energy Phys., New J. Phys., Nucl. Inst. Meth. B, Centr. Eur. J. Phys.;
- Reviewer of grant proposals for U.S. NSF and DOE (incl. 2009 Lab Theory review panel), DFG (Germany), U.S.-Israel BSF, ISF (Israel), FOM (Netherlands), INFN (Italy), MINERVA (Germany), NSC (Poland), NSERC (Canada)
- Introduced+directed *Saturday Morning Physics* for high school students at TAMU 2006-16
- Editorial Board Member of *Physics Handbook of Compressed Baryonic Matter (CBM) in Laboratory Experiments* (ca. 1000 pages, 2006-2010)
- Working group convener of: *Electromagnetic Probes at RHIC-II* (2004-08), *In-Medium Excitations* for CBM Physics Handbook (2006-10)
- Organizer of EMMI Rapid Reaction Task Force on *Extraction of Heavy-Flavor Transport Coefficient in QCD Matter* (2016)

## Students and Postdoctoral Trainees supervised

Research Experience for Undergraduates (REU) adviser of 13 undergraduate students of (10 received CEU fellowships for annual APS-DNP meetings)

Graduate Thesis adviser of:

- L. Grandchamp (New York), PhD SUNY SB 2003; D. Sun (Baylor), MSc TAMU 2006;
- X. Zhao (IMP Lanzhou), PhD TAMU 2010; K. Huggins (Dallas), MSc TAMU 2012;
- I. Sarver (TAMU) MSc TAMU 2014; N. Holt PhD TAMU 2016; S. Liu, PhD exp. 2017
- J. Atchison, PhD exp. 2018; X. Du, PhD exp. 2018

Postdoctoral adviser of:

- H. van Hees (FIAS Frankfurt, GER) 2004-08, M. Mannarelli (Gran Sasso, Italy) 2004-05,
- W. Liu (TAMU) 2005, D. Cabrera (Valencia) 2005-07, L. Ravagli (London) 2006-07,
- F. Riek (Frankfurt) 2008-10, M. He (Nanjing, CN) 2009-12, P. Hohler (Houston) 2011-15