

Program



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17:00	Horst Lenske (Gießen) <i>Strangeness production in heavy-ion collisions and antiproton annihilation</i>
17:30	Ralf Rapp (College Station) <i>Heavy Flavor in Medium</i>
18:10	Jacobus Verbaarschot (Stony Brook) <i>Wilson Fermions and QCD at Nonzero Isospin Chemical Potential</i>
18:50	Amand Fäßler (Tübingen) <i>Search for the Neutrino Background</i>

Personal Remarks

- Jochen Wambach has served as Second Examiner for 24 of my 105 doctoral students
- 25 joint publications with Jochen Wambach (1985 - present):

HIGH-RESOLUTION INELASTIC ELECTRON SCATTERING AND THE NATURE OF THE M1 TRANSITIONS TO THE $J^\pi = 1^+$ STATE AT $E_x = 5.846$ MeV IN ^{208}Pb

S. Müller, G. Kuchler, A. Richter, H.P. Blok, H. Blok, C.W. de Jager, H. de Vries and J. Wambach

Phys. Rev. Letters 54, (1985) 293

FINE STRUCTURE OF THE ISOSCALAR GIANT QUADRUPOLE RESONANCE IN ^{208}Pb OBSERVED IN HIGH-RESOLUTION (e,e') AND (p,p') SCATTERING

S. Kamerdzhiev, J. Lisantti, P. von Neumann-Cosel, A. Richter, G. Tertychny and J. Wambach

Phys. Rev. C55, (1997) 2101

SPIN AND ORBITAL MAGNETIC QUADRUPOLE RESONANCES IN ^{48}Ca AND ^{90}Zr FROM 180° ELECTRON SCATTERING

P. von Neumann-Cosel, F. Neumeyer, S. Nishizaki, V.Yu. Ponomarev, C. Rangacharyulu, B. Reitz, A. Richter, G. Schrieder, D.I. Sober, T. Waindzoeh and J. Wambach

Phys. Rev. Letters 82, (1999) 1105

Personal Remarks



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ELECTRIC AND MAGNETIC GIANT RESONANCES STUDIED WITH ELECTRON SCATTERING AT THE S-DALINAC

P. von Neumann-Cosel, C. Bähr, F. Hofmann, F. Neumeyer, S. Nishizaki, V.Yu. Ponomarev, C. Rangacharyulu, B. Reitz, A. Richter, G. Schrieder, K. Schweda, A. Stascheck, S. Strauch, T. Waindzoch and J. Wambach
Nucl. Phys. A654, (1999) 743c

TRANSVERSE ELECTRON SCATTERING FORM FACTORS AT LOW MOMENTUM TRANSFER: SENSITIVITY TO IN-MEDIUM MODIFICATIONS OF VECTOR MESONS?

P. von Neumann-Cosel, F. Neumeyer, B. Reitz, A. Richter and J. Wambach
Phys. Rev. C62, (2000) 034307

GIANT RESONANCES IN THE DOUBLY MAGIC NUCLEUS ^{48}Ca FROM THE $(e,e'n)$ REACTION

S. Strauch, P. von Neumann-Cosel, C. Rangacharyulu, A. Richter, G. Schrieder, K. Schweda and J. Wambach
Phys. Rev. Letters 85, (2000) 2913

MULTIPLE SCALES IN THE FINE STRUCTURE OF THE ISOSCALAR GIANT QUADRUPOLE RESONANCE IN ^{208}Pb

D. Lacroix, A. Mai, P. von Neumann-Cosel, A. Richter and J. Wambach
Phys. Letters B479, (2000) 15

DIRECT EVIDENCE FOR AN ORBITAL MAGNETIC QUADRUPOLE TWIST MODE IN NUCLEI

B. Reitz, A.M. van den Berg, D. Frekers, F. Hofmann, M. de Huu, Y. Kalmykov, H. Lenske, P. von Neumann-Cosel, V.Yu. Ponomarev, S. Rakers, A. Richter, G. Schrieder, K. Schweda, J. Wambach and H.J. Wörtche
Phys. Letters B532, (2002) 179



SELF ENERGIES OF THE PION AND THE Δ ISOBAR FROM THE ${}^3\text{He}(e, e'\pi^+)$ REACTION

M. Kohl, P. Bartsch, D. Baumann, J. Bermuth, R. Böhm, K. Bohinc, S. Derber, M. Ding, M.O. Distler, I. Ewald, J. Friedrich, J.M. Friedrich, P. Jennewein, M. Kahrau, S.S. Kalamov, A. Kozlov, K.W. Krygier, M. Kuss, A. Liesenfeld, H. Merkel, K. Merle, U. Müller, R. Neuhausen, T. Pospischil, M. Potokar, C. Rangacharyulu, A. Richter, D. Rohe, G. Rosner, H. Schmieden, G. Schrieder, M. Seimetz, S. Širca, T. Suda, L. Tiator, M. Urban, A. Wagner, Th. Walcher, J. Wambach, M. Weis and A. Wirzba

Phys. Letters **B530**, (2002) 67

NATURE OF LOW-ENERGY ELECTRIC DIPOLE STRENGTH IN NUCLEI: THE CASE OF A RESONANCE AT PARTICLE THRESHOLD IN ${}^{208}\text{Pb}$

N. Ryezayeva, T. Hartmann, Y. Kalmykov, H. Lenske, P. von Neumann-Cosel, V.Yu. Ponomarev, A. Richter, A. Shevchenko, S. Volz and J. Wambach

Phys. Rev. Letters **89**, (2002) 272502

FINE STRUCTURE IN THE ENERGY REGION OF THE ISOSCALAR GIANT QUADRUPOLE RESONANCE: CHARACTERISTIC SCALES FROM A WAVELET ANALYSIS

A. Shevchenko, J. Carter, R.W. Fearick, S.V. Förtsch, H. Fujita, Y. Fujita, Y. Kalmykov, D. Lacroix, J.J. Lawrie, P. von Neumann-Cosel, R. Neveling, V.Yu. Ponomarev, A. Richter, E. Sideras-Haddad, F.D. Smit and J. Wambach

Phys. Rev. Letters **93**, (2004) 122501

SPECTRAL STATISTICS AND THE FINE STRUCTURE OF THE ELECTRIC PYGMY DIPOLE RESONANCE IN $N = 82$ NUCLEI

J. Enders, T. Guhr, A. Heine, P. von Neumann-Cosel, V.Yu. Ponomarev, A. Richter and J. Wambach

Nucl. Phys. **A741**, (2004) 3



POLARIZED PROTON SCATTERING ON ^{58}Ni AT SMALL MOMENTUM TRANSFER:
A TEST OF THE MICROSCOPIC OPTICAL MODEL AND EFFECTIVE INTERAC-
TIONS

F. Hofmann, C. Bäumer, A.M. van den Berg, D. Frekers, V.M. Han-
nen, M.N. Harakeh, M.A. de Huu, Y. Kalmykov, P. von Neumann-Cosel,
V.Yu. Ponomarev, S. Rakers, B. Reitz, A. Richter, A. Shevchenko, K. Schweda,
J. Wambach and H.J. Wörtche
Phys. Letters B612, (2005) 165

FINE STRUCTURE OF THE GAMOW-TELLER RESONANCE IN ^{90}Nb AND LEVEL
DENSITY OF 1^+ STATES

Y. Kalmykov, T. Adachi, G.P.A. Berg, H. Fujita, K. Fujita, Y. Fujita,
K. Hatanaka, J. Kamiya, K. Nakanishi, P. von Neumann-Cosel, V.Yu. Pono-
marev, A. Richter, N. Sakamoto, Y. Sakemi, A. Shevchenko, Y. Shimbara,
Y. Shimizu, F.D. Smit, T. Wakasa, J. Wambach and M. Yosoi
Phys. Rev. Letters 96, (2006) 012502

HIGH-ENERGY-RESOLUTION INELASTIC ELECTRON AND PROTON SCATTER-
ING AND THE NATURE OF MULTI-PHONON MIXED-SYMMETRY 2^+ STATES IN
 ^{94}Mo

O. Burda, N. Botha, J. Carter, R.W. Fearick, S.V. Förtsch, C. Fransen, H. Fu-
jita, J.D. Holt, M. Kuhar, A. Lenhardt, P. von Neumann-Cosel, R. Neveling,
N. Pietralla, V.Yu. Ponomarev, A. Richter, O. Scholten, E. Sideras-Haddad,
F.D. Smit and J. Wambach
Phys. Rev. Letters 99, (2007) 092503



PROTON SCATTERING AT INTERMEDIATE ENERGIES ON ^{58}Ni : HOW WELL IS IT UNDERSTOOD?

F. Hofmann, C. Bäumer, A.M. van den Berg, D. Frekers, V.M. Hannen, M.N. Harakeh, M.A. de Huu, Y. Kalmykov, P. von Neumann-Cosel, V.Yu. Ponomarev, S. Rakers, B. Reitz, A. Richter, K. Schweda, A. Shevchenko, J. Wambach and H.J. Wörtche
Phys. Rev. C76, (2007) 014314

ANALYSIS OF FINE STRUCTURE IN THE NUCLEAR CONTINUUM

A. Shevchenko, J. Carter, G.R.J. Cooper, R.W. Fearick, Y. Kalmykov, P. von Neumann-Cosel, V.Yu. Ponomarev, A. Richter, I. Usman and J. Wambach
Phys. Rev. C77, (2008) 024302

GLOBAL INVESTIGATION OF THE FINE STRUCTURE OF THE ISOSCALAR GIANT QUADRUPOLE RESONANCE

A. Shevchenko, O. Burda, J. Carter, G.R.J. Cooper, R.W. Fearick, S.V. Förtsch, H. Fujita, Y. Fujita, Y. Kalmykov, D. Lacroix, J.J. Lawrie, P. von Neumann-Cosel, R. Neveling, V.Y. Ponomarev, A. Richter, E. Sideras-Haddad, F.D. Smit and J. Wambach
Phys. Rev. C79, (2009) 044305



COMPLETE ELECTRIC DIPOLE RESPONSE AND THE NEUTRON SKIN IN ^{208}Pb

A. Tamii, I. Poltoratska, P. von Neumann-Cosel, Y. Fujita, T. Adachi, C.A. Bertulani, J. Carter, M. Dozono, H. Fujita, K. Fujita, K. Hatanaka, A.M. Heilmann, D. Ishikawa, M. Itoh, H. J. Ong, T. Kawabata, Y. Kalmykov, E. Litvinova, H. Matsubara, K. Nakanishi, R. Neveling, H. Okamura, B. Özel-Tashenov, V.Yu. Ponomarev, A. Richter, B. Rubio, H. Sakaguchi, Y. Sakemi, Y. Sasamoto, Y. Shimbara, Y. Shimizu, F.D. Smit, T. Suzuki, Y. Tameshige, J. Wambach, R. Yamada, M. Yosoi and J. Zenihiro
Phys. Rev. Letters 107, (2011) 062502

ROTATIONAL STATES IN DEFORMED NUCLEI: AN ANALYTIC APPROACH

W. Bentz, A. Arima, J. Enders, A. Richter and J. Wambach
Phys. Rev. C84, (2011) 014327

LEVEL DENSITY OF 2^+ STATES IN ^{40}Ca FROM HIGH ENERGY-RESOLUTION (p,p') EXPERIMENTS

I. Usman, Z. Buthelezi, J. Carter, G.R.J. Cooper, R.W. Fearick, S.V. Förtsch, H. Fujita, Y. Kalmykov, P. von Neumann-Cosel, R. Neveling, A. Richter, A. Shevchenko, E. Sideras-Haddad, F.D. Smit and J. Wambach
Phys. Rev. C84, (2011) 054322



PYGMY DIPOLE RESONANCE IN ^{208}Pb

I. Poltoratska, P. von Neumann-Cosel, A. Tamii, T. Adachi, C.A. Bertulani, J. Carter, M. Dozono, H. Fujita, K. Fujita, Y. Fujita, K. Hatanaka, M. Itoh, T. Kawabata, Y. Kalmykov, A.M. Krumbholz, E. Litvinova, H. Matsubara, K. Nakanishi, R. Neveling, H. Okamura, H.J. Ong, B. Özel-Tashenov, V.Yu. Ponomarev, A. Richter, B. Rubio, H. Sakaguchi, Y. Sakemi, Y. Sasamoto, Y. Shimbara, Y. Shimizu, F.D. Smit, T. Suzuki, Y. Tameshige, J. Wambach, M. Yosoi and J. Zenihiro
Phys. Rev. C85, (2012) 043104(R)

LIFSHITZ AND EXCITED-STATE QUANTUM PHASE TRANSITIONS IN MICROWAVE DIRAC BILLIARDS

B. Dietz, F. Iachello, M. Miski-Oglu, N. Pietralla, A. Richter, L. von Smekal and J. Wambach
Phys. Rev. B88, (2013) 104101

ANALYTIC APPROACH TO NUCLEAR ROTATIONAL STATES AND THE ROLE OF SPIN: A MINIMAL MODEL

W. Bentz, A. Arima, A. Richter and J. Wambach
Phys. Rev. C89, (2014) 024314

FULLERENE C_{60} SIMULATED WITH A SUPERCONDUCTING MICROWAVE RESONATOR AND TEST OF THE ATIYAH-SINGER INDEX THEOREM

B. Dietz, T. Klaus, M. Miski-Oglu, A. Richter, M. Bischoff, L. von Smekal and J. Wambach
Phys. Rev. Letters 115, (2015) 026801

Personal Remarks

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**All the best, a good time at the ECT*
and many more fruitful years together !**