

# Curriculum Vitae

Peter Braun-Munzinger  
GSI, Darmstadt, Germany  
February 12, 2024

- Born 26 August 1946 in Heidelberg, Germany
- Education:  
Diplom (Physik) Universität Heidelberg, 1970  
Doctoral degree (Physics), summa cum laude, Universität Heidelberg, 1972
- Professional Experience:  
Research Associate, Max-Planck Institut für Kernphysik, Heidelberg, 1973-1976  
Visiting Assistant Professor, State University of New York at Stony Brook, N.Y., 1976-1978  
Guest Associate Physicist, Brookhaven National Laboratory, Upton, N.Y., 1977  
Assistant Professor of Physics, State University of New York at Stony Brook, N.Y., 1978  
Associate Professor of Physics, State University of New York at Stony Brook, N.Y., 1980  
Guest Scientist, GSI, Darmstadt, Germany, 1981  
Professor of Physics, State University of New York at Stony Brook, N.Y., 1982  
Guest Scientist, GSI Darmstadt, September 1984 - August 1985  
Spokesperson, AGS E814 Collaboration, Oct. 1985 - Dec. 1994  
Associate Editor, Phys. Rev. Letters, 1984-1987  
Spokesperson, AGS E877 Collaboration, March 1991 - Aug. 2003  
Leading Scientist, GSI, and Professor of Physics, Technical University Darmstadt, Jan. 1996 - Sep. 2011  
Project Leader, ALICE TPC, Nov. 1998 -Dec. 2010  
Member of GSI Directorate and Director of IT and Scientific Infrastructure, Nov. 1998 - Nov. 2006  
Associate Editor, Phys. Rev. Letters, Jan. 2000- Dec. 2002  
Associate Editor, Nucl. Phys. A, March 2003 -Dec. 2011  
Associate Editor, European Physics Journal A, July 2005 - September

2011

Scientific Director, ExtreMe Matter Institute EMMI, Helmholtz Alliance on 'Cosmic Matter in the Laboratory, April 2008 -

Senior Fellow, Frankfurt Institute for Advanced Studies (FIAS), June 2008 - Dec. 2014

Chair, ALICE collaboration board, Jan. 2011 - Dec. 2016

Supervisory Editor, Nucl. Phys. A, April 2012 - Dec. 2022 Helmholtz

Professor, GSI Helmholtz Zentrum für Schwerionenforschung, Oct. 2011

- Sep. 2014

Honorar-Professor, Universität Heidelberg, Oct. 2014 -

Gui Zhi-Ting Chair Professor, CCNU, Wuhan, China, July 2015 -

- Committees, Commissions:
  - Member, Users Executive Committee, Brookhaven National Laboratory, 1980-1983
  - Member, Executive Committee, Holifield Heavy Ion Research Facility, Oak Ridge, 1982-83
  - Chair, Executive Committee, Heavy Ion Users Group, Brookhaven National Laboratory, June 1984- June 1987
  - Member, Program Advisory Committee, Bevatron-Bevalac, Lawrence Berkeley Laboratory, Oct. 1985 - Dec. 1987
  - Member, NSAC Subcommittee on Facilities, May 1986
  - Member, Technical Review Committee, Chalk River Nuclear Laboratories, April 1987 - April, 1989
  - Member, NSAC, 1987-1990
  - Chair, NSAC Subcommittee on Instrumentation, Feb. 1988 -Feb. 1990
  - Co-Chair, Organizing Committee, Quark Matter '88 Conference, Lenox, Sept. 1988
  - Member, AGS Program Committee, October. 1988 - February, 1991
  - Member, Experimentausschuss, GSI, Darmstadt, April 1989-Dec. 1994
  - Member, Technical Review Committee, CEBAF, Dec. 1990
  - Member, NSF Site Review Committee, Michigan State University, May 1992
  - Member, DoE Nuclear Physics Review Panel, March - June, 1994
  - Member, Review Committee for the Dept. of Physics and Astronomy, University of Minnesota, June, 1994
  - Member, ISF Review Panel, Washington, DC, June 1994
  - Member, APS Review Panel of Physical Review C, Sep. 1994 - June, 1995
  - Member, PHENIX Executive Committee, 1995
  - Member, Organizing Committee, Quark Matter 1996 Conference
  - Member, Fachbeirat, IKP Jülich, Feb. 1996 - 1999
  - Co-Convener, GSI Study Group on Hot and Dense Nuclear Matter, Apr. 1996

Member, NUPECC Study Group, Ultrarelativistic Nuclear Collisions, May 1996 - Dec. 1996

Member, ECFA, May 1997 - May 2006

Member, OECD Megascience Group, April 1997- June 1998

Member, Management Board, ALICE Experiment, June 1997 -

Chair, Scientific Council, IKP, Jülich, April 1999-May 2004

Member, A. v. Humboldt Forschungspreis-Ausschuss, April 1999 - March 2008

Member and Chair, Stern-Gerlach Preiskomitee, Nov. 1999- Nov. 2006

Member, Organisationskomitee “Arbeitstreffen Kernphysik-Schleching”, Jan. 2001 -

Member and Vice-Chair, Komitee für Hadronen und Kernphysik, Feb. 2001 Feb. 2004

Member, GridKa Overview Board, FZ Karlsruhe, June 2001 - March 2007

Member, Board of Directors, ECT\*, Trento, Italy, Oct. 2001 - Oct. 2003

Chair, RHIC Detector Upgrade Committee, Brookhaven National Laboratory, USA, Oct. 2002 - Oct. 2005

Member, Laboratory Review Committee, LPC, Clermont-Ferrand, France, April 2003 -

Chair, Board of Directors, ECT\*, Trento, Italy, Oct. 2003 - April 2006

Chair, Komitee für Hadronen und Kernphysik, April 2004 - March 2007

Member, ICE Review Committee, Copenhagen, Danmark, Oct. 2004 - Dec. 2007

Member, Fellows and Associates Committee, CERN, May 2005 - April 2009

Member, ESFRI Roadmap Committee, July 2005 - April 2006

Member, OECD Megascience Forum, Nov. 2005 - July 2006

Chair, Arbeitstreffen Kernphysik, Schleching, Jan. 2005 -2023

Member, Rare Isotope Science Assessment Committee of the US National Academy, Nov. 2005 - Nov. 2006.

Member, Scientific Policy Committee, CERN, Jan. 2007 - Dec. 2012

Member, International Linear Collider Tracking R&D Review Committee, Jan. 2007 - Dec. 2009

Scientific Coordinator (with K. Langanke) of the Helmholtz Allianz ‘Cosmic Matter in the Laboratory’, March 2007 - Nov. 2007.

Member, A. von Humboldt Professor Selection Committee, March 2008 - April 2014

Chair, Science Faculty Evaluation Committee, Jyväskylä University, Finland, March 7 - 11, 2011.

Member, Wiss. Beirat, Wilhelm und Else Heraeus Stiftung, April 2012 - March 2014

Member, Preparatory Group, European Strategy Group, CERN Council, March 2012 - May 2013

Member, Research Council of the University of Heidelberg, July 2012 - 2019

Member, DoE Nuclear Physics Comparative Review Panel, Gaithersburg, Maryland, June 2013

Member, RIKEN-BNL Research Center Scientific Review Committee, Oct. 30 - Nov. 1, 2013, Brookhaven National Laboratory, USA

Member, DoE Panel on sPHENIX Review, July 1 - 2, 2014 and April 30, 2015, Brookhaven National Laboratory, USA

Member, Committee on U.S.-Based Electron-Ion Collider Science Assessment, U.S. National Academies of Sciences, Engineering, and Medicine, Feb. 2017 - July 2018

Member, Scientific Council of Subatech, Nantes, Jan. 2019 - Dec. 2022

Member, Research Council FoF2 of the University of Heidelberg, Sep. 2020 -

Member, International Advisory Committee on Future Large Facilities for Nuclear and Particle Physics in China, Chinese Academy of Sciences, Sep. 2022 -March 2023

Chair, Scientific Council of Subatech, Nantes, Jan. 2023 - Dec. 2023

- Fellowships, and Prizes:
  - Fellow of the “Studienstiftung des Deutschen Volkes”, 1970-1972
  - Fellow, American Physical Society, 1994
  - Prize of the Polish Ministry of Science, 2003
  - Werner Heisenberg Medal of the Alexander von Humboldt Foundation, June 2008
  - APS Outstanding Referee, Dec. 2010
  - Lise Meitner Prize of the European Physical Society, July 2014 (together with Paolo Giubellino, Jürgen Schukraft, Johanna Stachel)
  - Stern-Gerlach Medal of the German Physical Society 2019, Nov. 2018 (together with Johanna Stachel)
  - Distinguished Scientist, Chinese Academy of Science, President’s International Fellowship Initiative, June 2021 -Dec. 2023
  
- Membership in scientific academies:
  - Elected Member, Academia Europaea, July 2011
  - Elected Foreign Member, Polish Academy of Arts and Science, Nov. 2023
  
- Publications:
  - > 710 scientific publications
  - > 390 invited talks and colloquia

- 10 most important recent publications

1. QCD under Extreme Conditions, P. Braun-Munzinger, A. Rustamov and J. Stachel, in: F. Gross, E. Klempt, S. J. Brodsky, A. J. Buras, V. D. Burkert, G. Heinrich, K. Jakobs, C. A. Meyer, K. Orginos and M. Strickland, *et al.*, 50 Years of Quantum Chromodynamics, *Eur. Phys. J. C* **83** (2023), 1125 doi:10.1140/epjc/s10052-023-11949-2 [arXiv:2212.11107 [hep-ph]].
2. A. Andronic, P. Braun-Munzinger, M. K. Köhler, A. Mazeliauskas, K. Redlich, J. Stachel and V. Vislavicius, The multiple-charm hierarchy in the statistical hadronization model, *JHEP* **07** (2021), 035 doi:10.1007/JHEP07(2021)035 [arXiv:2104.12754 [hep-ph]].
3. P. Braun-Munzinger, B. Friman, K. Redlich, A. Rustamov and J. Stachel, Relativistic nuclear collisions: Establishing a non-critical baseline for fluctuation measurements, *Nucl. Phys. A* **1008** (2021), 122141 doi:10.1016/j.nuclphysa.2021.122141 [arXiv:2007.02463 [nucl-th]].
4. Anton Andronic, Peter Braun-Munzinger, Krzysztof Redlich, Johanna Stachel, Decoding the phase structure of QCD via particle production at high energy *Nature* **561** (2018) no.7723, 321-330.
5. J. Adam *et al.* [ALICE], Enhanced production of multi-strange hadrons in high-multiplicity proton-proton collisions, *Nature Phys.* **13** (2017), 535-539 [arXiv:1606.07424 [nucl-ex]].
6. P. Braun-Munzinger, V. Koch, T. Schäfer and J. Stachel, Properties of hot and dense matter from relativistic heavy ion collisions, *Phys. Rept.* **621**, 76 (2016) doi:10.1016/j.physrep.2015.12.003 [arXiv:1510.00442 [nucl-th]].
7. B. B. Abelev *et al.* [ALICE Collaboration], Centrality, rapidity and transverse momentum dependence of  $J/\psi$  suppression in Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV, *Phys.Lett.* **B734** (2014) 314-327, arXiv:1311.0214 [nucl-ex]
8. K. Aamodt *et al.*, ALICE coll., Suppression of charged particle production at large transverse momentum in central Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV, *Phys. Lett.* **B696** (2011) 30-39, arXiv:1012.1004 [nucl-ex].

9. J. Alme et al., the ALICE TPC coll., The ALICE TPC, a large 3-dimensional tracking device with fast read-out for ultra-high multiplicity events, Nucl. Instr. Meth. Phys. Research **A622** (2010) 316, arXiv:1001.1950 [physics.ins-det].
  10. A. Andronic, P. Braun-Munzinger and J. Stachel, Hadron production in central nucleus-nucleus collisions at chemical freeze-out,” Nucl. Phys. A **772** (2006) 167, nucl-th/0511071.
- Editorial Work:  
Editor/Co-Editor of 6 Scientific Books