

## Curriculum Vitae (January 2021)

### Berthold-Georg (Berge) Englert

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Home page: <http://phyweb.physics.nus.edu.sg/~phyebg>.

Scientific curriculum and full list of publications:

[http://phyweb.physics.nus.edu.sg/~phyebg/Papers/BGE\\_Papers.pdf](http://phyweb.physics.nus.edu.sg/~phyebg/Papers/BGE_Papers.pdf).

Web of Science publication statistics (h-index = 39):

<http://www.researcherid.com/rid/G-2286-2012>.

Google Scholar publication statistics (h-index = 51):

<https://scholar.google.com.sg/citations?hl=en&user=ttUoR04AAAAJ>.

### Personal information

Born 4 November 1953, married, two children (41 and 38 years); citizen of Germany;  
fluent in German, English, Polish.

### Education—Academic qualifications

1978 Diploma in Physics, University of Tübingen, Germany  
1981 Dr. rer. nat., University of Tübingen, Germany  
1990 Habilitation, University of Munich, Germany

### Positions held

1981–85 Postdoc, University of California at Los Angeles, USA  
1985–95 Akademischer Rat; Oberassistent, Privatdozent (from 1991),  
University of Munich, Germany  
1995–2003 Visiting Professorships in France, Germany, Austria, USA,  
Italy, Singapore  
since June 2003 Professor, NUS  
since January 2008 Principal Investigator, CQT  
since January 2014 Vice-Director, MajuLab, CNRS-UCA-SU-NUS-NTU Interna-  
tional Joint Research Unit, UMI 3654, Singapore

### Research

1981–93 Semiclassical theory of atoms (monograph in 1998)  
1989–98 Classical-quantum boundary  
1991–now Complementarity and wave-particle duality  
1993–now Quantum optics: micromaser theory; master equations; cavity QED  
(review article in 2006)  
1997–now Quantum information: quantum cryptography (“Singapore protocol”  
2004); quantum communication; quantum computation; mutually un-  
biased bases (review article 2010); quantum state tomography and esti-  
mation; sampling from the quantum state space  
2001–now Ultracold trapped fermionic atoms

## Awards

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1976–81	Fellow of the German National Academic Foundation
1981–85	Feodor Lynen Fellow of the Humboldt Foundation
2003, 2008	Faculty teaching awards, NUS
2006	National Science Award, Singapore (Co-Recipient)
2008	Outstanding Referee, American Physical Society
2009–12	Provost's Chair in Science, NUS
2012	Fellow of the Institute of Physics (IPS), Singapore
2014	Distinguished Referee, European Physical Journal
2015	Fellow of the American Physical Society
2020	IPS President Medal for 2019

## Boards

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1997–99	Member of the Editorial Board, Physical Review A
2000–11	Associate Editor, Zeitschrift für Naturforschung
2001–16	Member of the Board of Editors, Lecture Notes in Physics Book Series, Springer Verlag
2002–now	Member of the Board of Directors, Scientific Secretary Julian Schwinger Foundation for Physics Research
2002–now	Managing Editor, International Journal of Quantum Information
2012–2019	Co-Editor, Europhysics Letters

## Five most cited papers (citation count on 17 January 2021)

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M. O. Scully, B.-G. Englert, and H. Walther

*Quantum optical tests of complementarity*

Nature **351**, 111–116 (1991)

[603/1046 citations (Web of Science/Google Scholar)]

B.-G. Englert

*Fringe Visibility and Which-Way Information: An Inequality*

Physical Review Letters **77**, 2154–2157 (1996)

[504/856 citations]

H. Walther, B. T. H. Varcoe, B.-G. Englert, and T. Becker

*Cavity Quantum Electrodynamics*

Reports on Progress in Physics **69**, 1325–1382 (2006)

[477/878 citations]

T. Busch, B.-G. Englert, K. Rzążewski, and M. Wilkens

*Two Cold Atoms in a Harmonic Trap*

Foundations of Physics **28**, 549–559 (1998)

[477/770 citations]

A. Beige, B.-G. Englert, C. Kurtsiefer, and H. Weinfurter

*Secure communication with a publicly known key*

Acta Physica Polonica A **101**, 357–368 (2002)

[357/522 citations]