

# Artur T. Swiech: Curriculum Vitae

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## Education

M.Sc. Theoretical Physics, *Cum Laude*, Jagiellonian University, 2013.  
B.Sc. Theoretical Physics, *Cum Laude*, Jagiellonian University, 2011.

## Languages

English - fluent, C1 level.  
German - basic, B1 level.

## Fields of Research Interest

Random Matrix Theory,  
Products of random matrices,  
Double Pomeron Exchange

## Research

### *Journal Papers*

Z. Burda, M. A. Nowak, A. Swiech - "*Spectral relations between products and powers of isotropic random matrices*", Phys. Rev. E 86, 061137 (2012).  
Z. Burda, A. Jarosz, G. Livan, M. A. Nowak, A. Swiech - "*Eigenvalues and Singular Values of Products of Rectangular Gaussian Random Matrices*", Phys. Rev. E 82, 061114 (2010).

### *Proceedings Papers*

M. Albrow, CDF Collaboration, D. Lontkovskiy, I. Makarenko, A. Swiech, M. Zurek - "*Central exclusive production of hadrons in CDF*", AIP Conf. Proc. 1523:294-297 (2013).  
M. Albrow, A. Swiech, M. Zurek on behalf of the CDF collaboration - "*Exclusive Central Meson Production in Proton Antiproton Collisions at the Tevatron*", EPJ Web of Conferences 37 06011 (2012).

Z. Burda, A. Jarosz, G. Livan, M. A. Nowak, A. Swiech - "*Eigenvalues and Singular Values of Products of Rectangular Gaussian Random Matrices (The Extended Version)*", Acta Phys.Polon.B42:939-985 (2011).

### Preprints

Z. Burda, G. Livan, A. Swiech - *Commutative law for products of infinitely large isotropic random matrices*, arXiv:1303.5360 (2013).

## Honors & Awards

Scholarship of Polish Ministry of Science and Higher Education for academic year 2012/2013.

Scholarship of Polish Ministry of Science and Higher Education for academic year 2011/2012.

Scholarship of Polish Ministry of Science and Higher Education for academic year 2010/2011.

Scholarship of Polish Ministry of Science and Higher Education for academic year 2009/2010.

## Conferences and Workshops Attended

VIII Brunel-Bielefeld Workshop on Random Matrix Theory, Uxbridge, United Kingdom.

Poster: *Self-averaging and Spectral Commutativity of Isotropic Random Matrices*

Workshop on Random Matrices and Their Applications, Paris, France.

12th International Workshop on Meson Production, Properties and Interaction, Krakow, Poland.

The OIST Spring Course on Random Matrix Theory for Complex Systems, Okinawa, Japan.

Poster: *Eigenvalues and Singular Values of Products of Rectangular Gaussian Random Matrices*

XI National Session of Physics Students Associations, Warsaw, Poland.

Talk: *From classical to quantum chaos*

X National Session of Physics Students Associations, Poznan, Poland.

Talk: *Theoretical approach to wireless communication*

IX National Session of Physics Students Associations, Torun, Poland.

Talk: *Random matrices in physical applications*

## Programming languages

C

C++

ROOT

Mathematica

## Miscellaneous

Fermi National Accelerator Laboratory Visitor from July 2008

Chairman of Mathematical and Scientific Association of Jagiellonian University Students in academic year 2010/2011