

SEARCH:

Go

[jg Statistics](#) [jg Cornell](#) [more options](#)

# Main menu

## STATISTICS

[\[Cornell Day of Statistics\]](#)

[Cornell Day of Statistics](#)

Click here to register for the Cornell Day of Statistics.

The conference will take place at the Statler Hotel in the J. Willard Marriott Executive Education Center.

Program...

[Registration for the Cornell Day of Statistics](#)

[Cornell Day of Statistics Dinner](#)

[Titles and Abstracts for Day of Statistics Presentations](#)

[About Us](#)

[About Us](#)

Our department offers three programs at the undergraduate and graduate levels. Students can earn a BA in either Biometry or Statistics. The MPS offers students the opportunity to...

[Welcome to the Department of Statistical Science](#)

[Department Administration](#)

[History](#)

[Facilities](#)

[Recently Published Papers](#)

[Academics](#)

[Academics](#)

[Undergraduate](#)

[MPS](#)

[PhD](#)

[Courses](#)

[People](#)

[People](#)

[Faculty](#)

[Staff](#)

[PHDS](#)

[Emeritus Faculty](#)

[Field Faculty](#)

[News and Events](#)

[News and Events](#)

[Events](#)

[News](#)

[Resources](#)

[Resources](#)

[Department Administration](#)

[Professional Societies and Meetings](#)

Cornell's Statistical Science degrees prepare students for a wide variety of careers, from academia to industry. See the [After Graduation](#) page for a general overview of what...



## Michael Nussbaum

PROFESSOR  
MATHEMATICS

[MichaelNussbaumCV.pdf](#)

Research Area: Mathematical statistics

My research program focuses on asymptotic methods in quantum statistics, in particular on hypothesis testing and discrimination between states of quantum systems. Further topics are the equivalence theory of statistical experiments, asymptotic inference in locally stationary time series and adaptive nonparametric hypothesis testing.

### PUBLICATIONS

Grama, I and Nussbaum, M., Asymptotic equivalence for nonparametric regression. *Mathematical Methods of Statistics* 11 (1) 1-36 (2002)

Grama, I and Nussbaum, M., A functional Hungarian construction for sums of independent random variables. *Annales de l'Institut Henri Poincare, Probabilites et Statistiques*, 38 (6) pp. 923-957 (2002) pdf Based on the preprint A nonstandard Hungarian construction for partial sums. WIAS-preprint No. 324, 1997, Weierstrass Institute, Berlin

Jaehnisch, M. and Nussbaum, M., Asymptotic equivalence for a model of independent non identically distributed observations. *Statistics & Decisions* 21 197-218 (2003)

Nussbaum, M., Equivalence asymptotique des experiences statistiques. (Survey paper in French). *Journal de la Societe francaise de Statistique* 145 (1) 31-45 (2004)

Jaehnisch, M. and Nussbaum, M., A functional Hungarian construction for the sequential empirical process, *C.R. Acad. Sci. Paris, Ser. I* 341 761-763 (2005)

Audenaert, K. M. R., Nussbaum, M., Szkola, A. and Verstraete, F., Asymptotic error rates in quantum hypothesis testing. *Commun. Math. Phys.* 279 (1) 251-283 (2008)

Nussbaum, M. and Szkola, A., The Chernoff lower bound for symmetric quantum hypothesis testing. *Ann. Statist.* 37 (2) 1040-1057 (2009)

Golubev, G. K., Nussbaum, M. and Zhou, H. H., Asymptotic equivalence of spectral density estimation and Gaussian white noise, *Ann. Statist.* 38 (1) 181-214 (2010)

Nussbaum, M. and Szkola, A., Exponential error rates in multiple state discrimination on a quantum spin chain, *J. Math. Phys.* 51 072203 (2010)

Nussbaum, M. and Szkola, A., Asymptotically optimal discrimination between multiple pure quantum states. Submitted.

## Contact Info

607-255-3403

[nussbaum@math.cornell.edu](mailto:nussbaum@math.cornell.edu)

441 Malott Hall

[Cornell.edu Profile](#)

[Michael Nussbaum's Homepage](#)

## Downloads

[MichaelNussbaumCV.pdf](#) (pdf, 104.36 KB)

## Footer Menu

[Home](#) [About Us](#) [Contact](#) [Careers](#)