

# Curriculum Vitae Santanu Dey

## Personal Data

Name : Santanu Dey  Sex : Male  
 Date of Birth : 18<sup>th</sup> March, 1976  Nationality : Indian

## Official Address

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### (1) Current Occupation

As a Wissenschaftlicher Mitarbeiter (Assistant Professor) in Mathematics at EMA Universität, Greifswald.

### (2) Educational Background

Degree	Institute /University	Year
PhD	Indian Statistical Institute Bangalore	Submitted: May 2004 Awarded: Feb 2005
Master of Science (Mathematics)	Indian Institute of Technology Bombay	1996-98
Bachelor of Science (Mathematics)	CHM College, University of Mumbai	1993-96

### (3) Areas of Interest

Operator Algebras, Quantum Probability, Operator Spaces, CP-semigroups

### (4) PhD Thesis

Title- *Standard dilations of tuples and representations of certain  $C^*$ -algebras*  
Indian Statistical Institute. Thesis advisor - Prof B. V. Rajarama Bhat.

### (5) Publications

1. Standard noncommuting and commuting dilations of commuting tuples- (with B. V. Rajarama Bhat, T. Bhattacharyya), Trans. Amer. Math. Soc. 356 (2004), 1551-1568.
2. Standard dilations of  $q$ -commuting tuples, preprint 2003
3. Minimal Cuntz-Krieger dilations and representations of Cuntz-Krieger algebras- (with B. V. R. Bhat and J. Zacharias), accepted by Proc. Ind. Acad. of Sci.
4. Characteristic functions of ergodic tuples- (with R. Gohm), preprint 2005.

### (6) Teaching/research experience

1. Teaching Assistant for a course Algebra I (Winter Semester 2005) EMA Universität Greifswald.
2. JRF/ SRF fellow at ISI Bangalore during my PhD studies. I gave several talks and four lectures to graduate students on for a course on Operator Algebras at ISI Bangalore.
3. Research Fellow of German Academic Exchange Service (DAAD) fellowship for one year (+ 4 months) for research in Mathematics at EMA Universität, Greifswald form

June 2004 till September 2005.

(7) **Conferences and Workshops**

I attended the following:

1. Workshop on “Algebraic Number Theory” held at Hyderabad University (central), from 1<sup>st</sup> to 21<sup>st</sup> December 1999.
2. International conference on “Spectral and Inverse Spectral Problems for Schrodinger Operator” held at Goa, from 14<sup>th</sup> to 20<sup>th</sup> December 2000.
3. “International workshop on Linear Algebra, Numerical Functional Analysis and Wavelet Analysis” held at Cochin University from 6<sup>th</sup> to 15<sup>th</sup> August 2001.
4. Workshop on “Advances in Operator Theory and Operator Algebras-II” from 24<sup>th</sup> December 2001 to 4<sup>th</sup> January 2002 at Indian Statistical Institute, Bangalore. I gave a talk on “Two Types of Standard Dilations”.
5. Short School on “Quantum Independent and Increment Processes” from 9<sup>th</sup> to 22<sup>nd</sup> March 2003 at Greifswald, Germany. I also visited the Institut für Mathematik und Informatik, EMA Universität, Greifswald, Germany for the next two weeks and gave three talks on “Dilation of Tuples” in the Institute Seminar series.
6. “Joint India AMS Meeting” from 17<sup>th</sup> to 20<sup>th</sup> December 2003 at Bangalore. I had an article “ $q$ -commuting Dilations” in the poster section.
7. “25<sup>th</sup> QP Conference- Quantum Probability and Related Topics” from 20<sup>th</sup> to 26<sup>th</sup> June 2004 at Bedlewo, Poland. I gave a talk on “Minimal Cuntz-Krieger Dilations”.
8. Workshop on “Quantum Coding” from 7<sup>th</sup> to 9<sup>th</sup> September 2004 at EMA Universität, Greifswald.
9. “26<sup>th</sup> QP Conference- Quantum Probability and Infinite Dimensional Analysis” from 22<sup>nd</sup> to 24<sup>th</sup> February 2005 at Levico, Italy.
10. Conference on “Operator Algebras and Applications” at National University of Ireland, Cork from 1<sup>th</sup> to 4<sup>th</sup> June 2005. I gave a talk on “Characteristic Functions and dilations”.
11. Fields Institute Summer school in “Operator Algebras” June 7<sup>th</sup> to 17<sup>th</sup> June 2005 at the University of Ottawa, Ontario Canada.

(8) **Other Academic Details**

1. I gave a talk on “Arveson’s and Popescu’s invariants for Hilbert modules” in the Stat-Math Unit seminar series at ISI Bangalore on 10<sup>th</sup> August 2000.
2. I gave several talks on topics related my research area in ISI Bangalore and EMA Universität, Greifswald.
3. Knowledge in Computers - C programming, Latex and basic knowledge in OS, Html, Database, etc.
4. Knowledge of Western Languages: English (fluent), German (good).

(9) **Awards and Fellowships**

1. Junior and Senior Research Fellowship from Indian Statistical Institute from July 1999 to May 2004.
2. Ranked top 20 % among the candidates selected for Junior Research Fellowship of CSIR.
3. International travel support etc from NBHM, Fields Institute and some conference organisers.
4. German Academic Exchange Service (DAAD) fellowship for one year (+ 4 months).