# Curriculum vitae

# Academic positions in theoretical physics:

#### 1987.. 1991

- Ph.D. student, Institute of Optics and Spectroscopy Berlin, Theoretical Physics Division.
- Simulation of high-power laser-plasma interactions.

#### 1992.. 1997

- Post-doctoral researcher, Max-Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin.
- Numerical models for Quantum Well laser devices. Numerical solutions for systems of non-linear partial differential equations.

# Academic positions in bioinformatics/biostatistics:

#### 1997.. 2000

- Research scientist in Bioinformatics, Institute of Molecular Biotechnology (IMB), Jena/Germany.
- Models and software for the analysis of DNA sequences.

#### 1999 .. 2000

Leader of the Bioinformatics group of the Genome Analysis Division at IMB (10 scientists).

#### 2000 .. 2009

- Senior Research Scientist and Team Leader at the Rudbeck Laboratory, Uppsala University, Sweden.
- Comparative Genomic Hybridization, Microarrays, High-throughput data mining, statistical analysis of biological data, Software for Next Generation Sequencing

#### **Summer 2007**

- Visiting researcher at the Leibniz Institute for Age Research (FLI) in Jena, Germany
- Data Mining for Next Generation Sequencing

### 2008.. 2010

University lecturer in Mathematical Statistics at Ångström Laboratory, Uppsala University

### Research interests:

Bioinformatics, Data mining, Applied Mathematics and Statistics, Scientific Computing,.

#### Education:

#### October 1981 .. July 1986

• Study of Physics at Humboldt-University Berlin.

### July 1986

• Diploma (Physicist), with best grades in Mathematics and Theoretical Physics

#### November 1992

Graduation (Dr. rer. nat.) in Theoretical Physics at Friedrich-Schiller-University Jena/Germany (as an
external while affiliated with Max-Born-Institute in Berlin). Topic: Numerical calculation of the X-ray
intensity in laser induced plasmas.

#### Spring 2008

• Post-gradual study "Time series analysis" (passed with special distinction)