



## Curriculum vitae Hans-Stephan Bosch

Date of birth: 29. May 1957  
Place of birth: Stuttgart  
Family status: married, two children

Vordiplom 09/1979  
Dipl.-Phys. 08/1983  
Dr. rer. nat. 12/1986  
Habilitation 07/2000

### EDUCATION

Westfälische Wilhelms-University Münster  
Ludwig-Maximilians-University München  
Technical University München (summa cum laude)  
Habilitation for experimental plasma physics at the  
Humboldt-University in Berlin

### SCIENTIFIC CAREER

11/1973 – 12/1986  
2/1987 – 1/1988

Ph.D. work at the tokamak ASDEX in IPP  
Post-Doc at Princeton University, Princeton Plasma Physics Laboratory, New  
Jersey: Diagnostics with fusion reaction products on TFTR

1988 – 1990

staff member at the tokamak ASDEX, working on neutron diagnostics

1990 – 2000

staff member at the tokamak ASDEX Upgrade

#### scientific interests

- investigation of fusion neutrons and charged fusion products
- divertor physics, 2-d modelling of the divertor plasma
- helium transport and -exhaust

#### Administrative functions

- radiation safety officer for ASDEX Upgrade
- session leader at ASDEX Upgrade
- group leader „diagnostics III“

2000-2003

head of the scientific-technical office in IPP (staff office of the director)

1/2004 – 10/2013

leader of Project coordination Wendelstein 7-X in IPP Greifswald

highlights in this period:

- Development and implementation of the „Integrated Planning Tool“
- Introduction of a risk budget into the W7-X planning

5/2006-9/2017

associate director coordinaton of Wendelstein 7-X

28.02.2008

„Venia Legendi“ for experimental physics at Greifswald University  
(Privatdozent)

Since 11/2013

division head „Wendelstein 7-X operation“ and „Technical. Leader“  
This divison with about 90 staff is responsible for the technical operation of  
W7-X, for CoDaC (data acquisition, control and safety control systems,  
general IT and communications) as well as for the operational management of  
the plasma experiments.

3/2014 – 12/2015 Chief Commission Manager (CGM), responsible for the first commissioning of Wendelstein 7-X.

- the commissioning procedures have been further developed for the operation phases OP 1.2 and OP 1.2b.
- for the operation phases, a system of deputies (TLvD) was set up to lead the technical operation of W7-X.

5.08.2016 appointment as „Honorarprofessor“ at the Technical University Berlin.

Since 10/2017 Deputy of the scientific director of *Wendelstein 7-X/completion*

### AWARDS

1987 Otto-Hahn-medal of the Max-Planck-Gesellschaft

### MEMBERSHIP IN COMITEES

1990 – 1992 chair of the scientists council at IPP

1997 – 2000 elected representative of the IPP scientists in the CPTS of the Scientific Council of the Max-Planck-Society; member in 2 appointment committees.

1999 – 2001 member of the EFDA JET-sub-committee, which controls and monitors operations of JET.

2000 – 2006 member of the management council of the German Physical Society (DPG)

2008 – 2009 member of the ITER Cost Review (Briscoe-Panel)

since 2009 member of the Fusion Technology Committee (FTC) of the IEEE Nuclear & Plasma Science Society (NPSS)

2014 – 2017 member of the MAST-U review group in CCFE, Culham, UK

2018 member of the NSTX Director's review in PPPL, NJ, USA

### TEACHING

WS 91/92 – SS 94 Augsburg University

- exercises in Experimentalphysik III and IV and
- lectures in Plasmaphysik I and II

1995 – 2000 supervision of diploma- and Ph.D. theses on ASDEX Upgrade

1996 – 2000 leading the *Summer University on Plasma Physics* of IPP

WS 98/99 – SS 99 Humboldt-University in Berlin

lectures *Magneto-Hydrodynamik* and *Plasmadiagnostik*

WS 01/02 – WS 03/04 Ulm University

- lectures Einführung in die Plasmaphysik I and II
- organisation of hands-on training in Plasmaphysik

WS 04/05 Humboldt-University in Berlin

lectures in *Magneto-Hydrodynamik*

SS 09 – WS 15/16 Ernst-Moritz-Arndt-Universität Greifswald

- lectures in *Struktur der Materie für Umwelt-Wissenschaftler, Hochtemperatur Plasmaphysik, Fusionsphysik*
- supervision of a BA-thesis

since SS 2018 Technical University Berlin

- lectures in *controlled nuclear fusion*
- setting up and supervising an experiment for hands-on training