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Résumé Prof. Dr. Arne Kallenbach

Personal Details:

Name	Arne Kallenbach
Date and Place of Birth:	xx/xx/xx, xxxxx, xxxxxx
Nationality:	German
Place of Work:	Max-Planck-Institut für Plasmaphysik, Boltzmannstr. 2, D-85748 Garching

Contact:

Email: xxxxx Phone: xxxxx
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Education:

1979 – 1984	Physics study, University of Hannover
1985 – 1988	member at Institute for Plasma Physics, University of Hannover
11.02.1988	Graduation to Dr. rer. nat. at the University of Hannover.
01.02.1995	Habilitation to Dr. rer. nat. habil. for "Physics" at University of Hannover

Career:

1988-	Employed at Max-Planck-Institut für Plasmaphysik, Garching
1995-2006	Group leader for spectroscopy at ASDEX Upgrade
2001-2002	Deputy Task Force Leader Task Force E at JET/Culham/UK.
since 2002	Extra-ordinary Professor at Hannover University
2007-2010	Head (acting) of the Department E2: "Tokamak: Edge and Divertor Physics".
Aug. 2010-	Project Leader for the ASDEX Upgrade tokamak
2010-	Member of the ITPA CC-JEX meeting (machine leader AUG)
2013 - 2019	IFERC Project Committee Member
2014 - 2016	Member of CCFE Programme Advisory Committee
2017-	Member of IPP.CR International Board of Advisers
2019-	Member of the DIII-D Programme Advisory Committee (PAC)
2019-	Member of STAC
2021-	Member of the EUROfusion Tokamak Exploitation Project Board

Awards:

"Röntgenpreis" of the University Giessen (1994)
IAEA Nuclear Fusion Journal Prize 2018

Major Conference Talks

Closed Divertor Operation in ASDEX Upgrade and JET
Invited Talk, 26th EPS Conference on Controlled Fusion and Plasma Physics, Maastricht 1999

Tokamak operation with high-Z plasma facing components
Invited Talk, 32th EPS Conference on Controlled Fusion and Plasma Physics, Tarragona, Spain, 2005.

Plasma surface interactions in impurity seeded plasmas
Review Talk, 19th PSI Conference, San Diego, USA, 27.5.2010

Overview of ASDEX Upgrade results

Overview Talk, 23rd IAEA FEC Conference, Daejon, Korea, Oct 2010.

Impurity seeding for tokamak power exhaust: from present devices via ITER to DEMO
Plenary Invited Talk, 40th EPS Conference on Plasma Physics, Espoo, Finland, 1.-5.7.2013.

Partial detachment of high power discharges in ASDEX Upgrade
Invited Talk, 25th IAEA FEC Conference, St. Petersburg, Russia, Oct 2014.

Power and particle exhaust at high P/R in ASDEX Upgrade
Invited talk, 18th ICPP Conference, Kaohsiung, Taiwan, June 2016

Overview of ASDEX Upgrade results
Overview Talk, 26rd IAEA FEC Conference, Kyoto, Japan, Oct 2016.

General Comments

Prof. Kallenbach's main fields of interest are the edge and scrape-off layer plasma and its interaction with wall and divertor surfaces. He accomplished primary work on edge plasma physics and wall material release and developed foremost radiative cooling techniques in ASDEX Upgrade. Current focus of his work are operational aspects of a tokamak with fully tungsten-coated plasma facing components and the dissipation of high power levels in the divertor employing seed impurity radiation and hydrogenic momentum loss processes. His tasks as project leader for the ASDEX Upgrade tokamak include the setup of IPPs experimental programme, integration with the EUROfusion WP-TE programme, organisation of experiments conduction, supervision of tokamak operation and quality control and endorsement of publications and conference contributions.

(Prof. Dr. Arne Kallenbach)