

Workshop on RF Heating Technology of Fusion Plasmas 2016

US-EU-JPN RF Heating Technology Workshop:

September 21 (Wed) - 23 (Fri), 2016 / Hotel Leinsweiler Hof, Germany

September 20 (Tue)

18.00
Registration
Welcome to Leinsweiler

September 21 (Wed)

9.00 - 9.20 Registration
9.20 - 9.40 Opening address

9:40 T18

Session 1 (J. Jelonnek) T19

T01 H.P. Laqua (IPP) T20
T02 T. Goodman (EPFL) T21
T03 Z.C. Ioannidis (KIT) CB

CB 10.40 - 11.00

Session 2 (J.P. Anderson) T22

T04 S. Moriyama (QST) T23
T05 K. A. Avramidis (KIT) T24
T06 I. Gr. Pagonakis (KIT)

L 12.00 - 14.00 T25

Session 3 (T. Shimozuma) T26

T07 Y. A. Gorelov (GA) L
T08 S. Ruess (KIT)
T09 S. Illy (KIT)
T10 J. Jin (KIT)

CB 15.20 - 15.40

Session 4 (T. A. Scherer)

T11 J. P. Anderson (GA)
T12 W. Kasperek (IGVP)
T13 A. Zach (IGVP)
T14 F. Wilde (IPP)

CB 17.00 - 17.20

Session 5 (S. Illy)

T15 O. Dumbrajs (ISSP)
T16 C. Wu (KIT)
T17 A. Marek (KIT)

September 22 (Thu)

9:00

Session 6 (T. Goodman)

S. Garavaglia (IPP) T27
J. Jelonnek (KIT) T28
J. Ongena (RMA) T29
C. P. Moeller (GA) T30

10.20 - 10.40 CB

Session 7 (W. Kasperek)

T. Shimozuma (NIFS) T31
D. Wagner (IPP) T32
S. Jawla (MIT) T33

Session 8 (S. Moriyama) T34

A. A. Tuccillo (ENEA) L
T. A. Scherer (KIT)

12.20 - 14.00

14.00 - 18.30
Extended Discussion (Excursion)

18:30
Banquet
(Weingut Stübinger, Trifelsstr. 8,
Leinsweiler)

September 23 (Fri)

9:00

Session 9 (D. Wagner)

D. Strauss (KIT)
K. Takahashi (QST)
A. Vaccaro (KIT)
P. Spaeh (KIT)

10.20 - 10.40

Session 10 (D. Strauss)

B. Plaum (IGVP)
G. Aiello (KIT)
C. Lechte (IGVP)
M. Schubert (IPP)

12.00 - 14.00

14:00 - 15:30

Joint Planning (J. P. Anderson)

15:30 - 15:50

15:50

Closing

CB Coffee break

L Lunch

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Date	No.	Time	Name	Title	
20. Sep		18.00		Registration, Welcome to Leinsweiler	
		9.00 - 9.20		Registration	
		9.20 - 9.40		Opening address (???)	
		Session 1 (J. Jelonnek)			
	T01	9.40 - 10.00	H.P. Laqua (IPP)	ECRH and ECCD Experiments at the Wendelstein7-X Stellarator	
	T02	10.00 - 10.20	T. Goodman (EPFL)	The status of the millimeter wave components of the ITER upper launcher	
	T03	10.20 - 10.40	Z.C. Ioannidis (KIT)	Recent experimental results with the 1 MW – 170 GHz Industrial CW Prototype Gyrotron for ITER	
		10.40 - 11.00		Coffee break	
		Session 2 (J.P. Anderson)			
	T04	11.00 - 11.20	S. Moriyama (QST)	Status of ECH System toward JT-60SA	
	T05	11.20 - 11.40	K. A. Avramidis (KIT)	Simulations of the Experimental Operation of the EU 170 GHz, 1 MW Short-Pulse Prototype Gyrotron for ITER	
	T06	11.40 - 12.00	I. Gr. Pagonakis (KIT)	Magnetic Profile Analysis for High Power Gyrotron	
		12.00 - 14.00		Lunch	
		Session 3 (K. Takahashi)			
	T07	14.00 - 14.20	Y.A. Gorelov	The Gyrotron Complex on the DII-D Tokamak	
	T08	14.20 - 14.40	S. Ruess (KIT)	Ongoing Developments for the KIT 2-MW 170-GHz Coaxial Cavity Gyrotron	
	T09	14.40 - 15.00	S. Illy (KIT)	Analyzing Transient Phenomena in the Electron Gun of High Power Gyrotrons Using the ESRAY Beam Optics Code	
T10	15.00 - 15.20	J. Jin (KIT)	Improvement of harmonically deformed launchers for high power gyrotrons		
	15.20 - 15.40		Coffee break		
	Session 4 (T.A. Scherer)				
T11	15.40 - 16.00	J.P. Anderson (GA)	Development and High Power Verification of Components for ITER ECH		
T12	16.00 - 16.20	W. Kasperek (IGVP, Stuttgart)	Experiments with Resonant Diplexers for high-power ECRH		
T13	16.20 - 16.40	A. Zach (IGVP)	Towards in-situ real-time monitoring of spurious modes in HE11 transmission lines using multi-hole couplers in miter bends		
T14	16.40 - 17.00	F. Wilde (IPP)	An approach to an electronic stability control for gyrotrons		
	17.00 - 17.20		Coffee break		
	Session 5 (S. Illy)				
T15	17.20 - 17.40	O. Dumbrajs (ISSP)	Self-consistent non-stationary theory of the gyrotron		
T16	17.40 - 18.00	C. Wu (KIT)	Study of the Novel Ideas for Multistage Depressed Collector for Gyrotrons		
T17	18.00 - 18.20	A. Marek (KIT)	Development of a vector analysis code for the simulation of electromagnetic fields in the quasi-optical system of gyrotrons		
21. Sep		Session 6 (T. Goodman)			
	T18	9.00 - 9.20	S. Garavaglia (IPP)	DEMO EC system preliminary conceptual design	
	T19	9.20 - 9.40	J. Jelonnek (KIT)	Progress in EUROFUSION on gyrotron R&D and advanced developments for DEMO	
	T20	9.40 - 10.00	J. Ongena (RMA)	ICRF Traveling Wave Antenna system for DEMO	
	T21	10.00 - 10.20	C.P. Moeller (GA)	Travelling wave antenna development	
		10.20 - 10.40		Coffee break	
		Session 7 (W. Kasperek)			
	T22	10.40 - 11.00	T. Shimozuma (NIFS)	Present Status of the ECRH System in LHD and Development of a New Gyrotron and the Related Components	
	T23	11.00 - 11.20	D. Wagner (IPP)	Measuring the OHMIC loss of grooved polarizer mirrors for high-power ECRH systems	
	T24	11.20 - 11.40	S. Jawla (MIT)	Measurements and Simulations of the 170 GHz ECH Polarizers	
		Session 8 (S. Moriyama)			
T25	11.40 - 12.00	A.A. Tuccillo (ENEA)	Update of Cyclotron Auto-Resonance Maser (CARM) project at ENEA-FRASCATI		
T26	12.00 - 12.20	T.A. Scherer (KIT)	THz Technology: Ideas and considerations on possible diagnostics applications		
	12.20 - 14.00		Lunch		
	14.00 - 18.30		Extended Discussions (Excursion)		
	18.30		Banquet (Weingut Stübinger, Trifelsstr. 8, Leinsweiler)		
22. Sep		Session 9 (D. Waqner)			
	T27	9.00 - 9.20	D. Strauss (KIT)	Design status of the ITER EC H&CD Upper Launcher	
	T28	9.20 - 9.40	K. Takahashi (QST)	Status of ITER JA gyrotron and equatorial launcher	
	T29	9.40 - 10.00	A. Vaccaro (KIT)	Design Validation of the ITER EC-H&CD Upper Launcher's Components	
	T30	10.00 - 10.20	P. Späh (KIT)	Current Status of the structural design for the ITER EC Upper Launcher	
		10.20 - 10.40		Coffee break	
		Session 10 (D. Strauss)			
	T31	10.40 - 11.00	B. Plaum (IGVP)	Development of Remote-Steering Antennas for ECR heating of the Stellarator W7-X	
	T32	11.00 - 11.20	G. Aiello (KIT)	Diamond Window for the ITER EC-H&CD Upper Launcher- Status of Design, Testing and Qualification	
	T33	11.20 - 11.40	C. Lechte (IGVP)	Water-cooled cw loads for highpower millimetre waves	
T34	11.40 - 12.00	M. Schubert (IPP)	Multipass heating and invessel machine protection at ASDEX Upgrade		
23. Sep		12.00 - 14.00		Lunch	
		14.00 - 15.30		Joint Planning (J.P. Anderson)	
		15.30 - 15.50		Coffee break	
		15.50		Closing	