

Schedule EC20-2018

Monday, 14.05.2018	Tuesday, 15.05.2018	Wednesday, 16.05.2018	Thursday, 17.05.2018
08:00-09:00 Registration			
09:00-09:20 Opening	S4: ECH: Gyrotron Development	S7: Diagnostics: ECE and Imaging	S9: Diagnostics: Physics and Modelling
S1: ECH: Installation and Experiment chair: Heinrich Laqua	chair: Burkhard Plaum	chair: Max Austin	chair: John Lohr
09:20-09:50 Hiroe Igami	09:00-09:30 James Anderson	09:00-09:30 Viktor Udintsev	09:00-09:30 Simon Freethy
09:50-10:10 Jörg Stober	09:30-09:50 Grigory Denisov	09:30-09:50 Liu Yong	09:30-09:50 Alexander Creely
10:10-10:30 Robert Pinski	09:50-10:10 John Jelonnek	09:50-10:10 Roddy Vann	09:50-10:10 Udo Höfel
10:30-10:50 Coffeefbreak	10:10-10:30 Fabian Wilde	10:10-10:30 Min Jiang	10:10-10:30 Nikolai Marushchenko
	10:30-10:50 Coffeefbreak	10:30-10:50 Coffeefbreak	10:30-10:50 Coffeefbreak
S2: ECH: Operation and Experiment chair: Mei Huang	S5: ECH Components chair: Gregory Denisov	S8: Diagnostics: Scattering and Emission chair: Daniela Farina	S10: Theory and Modelling chair: Emanuele Poli
10:50-11:20 Heinrich Laqua	10:50-11:20 Handong Xu	10:50-11:20 Timothy P. Goodman	10:50-11:20 Daniela Farina
11:20-11:40 Andrew Seitzman	11:20-11:40 Alexander Zach	11:20-11:40 Stefan Kragh Nielsen	11:20-11:50 Alexei Popov
11:40-12:00 Alexander Borschegovskiy	11:40-12:00 Torsten Stange	11:40-12:00 Alessandro Bruschi	11:50-12:10 Pavel Aleynikov
12:00-12:20 Martin Schubert	12:00-12:20 Burkhard Plaum	12:00-12:20 Alf Köhn	12:10-12:30 Atsushi Fukuyama
12:20-14:00 Lunch	12:20-14:00 Lunch	12:20-13:00 packed Lunch	12:30-14:00 Lunch
S3: ITER ECRH chair: John Jelonnek	S6: Diagnostics: CTS chair: Shin Kubo	13:15-14:00 Bus to Stralsund	14:00-16:00 Poster Session 2
14:00-14:30 Franco Gandini	14:00-14:30 Søren Bang Korsholm		
14:30-14:50 Paco Sanchez	14:30-14:50 Dmitry Moseev		
14:50-15:10 Zisis Ioannidis	14:50-15:10 Teruo Saito		
15:10-15:30 Vipal Rathod	15:10-15:30 Stephen Cauffman		
15:30-15:50 Coffeefbreak	15:30-15:50 Coffeefbreak		
16:00-16:10 Bus to IPP	15:50-17:50 Poster Session 1	14:00-17:00 Guided tour Ozeaneum	
16:15-18:00 Visit W7-X			
18:00-21:00 Welcome Reception (IPP)		17:15-18:00 Bus to Greifswald city centre	16:00-16:30 Coffeefbreak
21:00-21:10 Bus to city centre		19:00-22:00 Dinner at Theatercafé	16:30-17:50 Summary Sessions
			16:30-16:50 Theory: Abhay Ram
			16:50-17:10 ECRH-Experiment: Young-soon Bae
			17:10-17:30 Diagnostics: Hans Oosterbeek
			17:30-17:50 Technology: John Jelonnek
			17:50-18:00 Emanuele Poli

Monday, 14.05.2018

start	end	duration	Who	Title
08:00	09:00	01:00	Registration	
09:00	09:20	00:20	Opening	
S1: ECH: Installation and Experiment				
chair: Heinrich Laqua				
09:20	09:50	00:30	Hiroe Igami	Recent progress of the applications of ECRH/ECCD and the supportive technologies in the LHD
09:50	10:10	00:20	Jörg Stober	The 8 MW dual-frequency ECRH system of ASDEX Upgrade
10:10	10:30	00:20	Robert Pinsker	Tests of Advanced RF Off-axis Current Drive Techniques on DIII-D
10:30	10:50	00:20	Coffeebreak	
S2: ECH: Operation and Experiment				
chair: Mei Huang				
10:50	11:20	00:30	Heinrich Laqua	Overview of W7-X ECRH Results
11:20	11:40	00:20	Andrew Seltzman	Observation of Electron Bernstein Wave Heating in the RFP
11:40	12:00	00:20	Alexander Borschegovskiy	Optimization of HF- injection at the 2nd harmonic of ECRH on T-10 tokamak in order to obtain high energy content in plasma
12:00	12:20	00:20	Martin Schubert	Beam tracing study for design and operation of two-pass electron cyclotron heating at ASDEX Upgrade
12:20	14:00	01:40	Lunch	
S3: ITER ECRH				
chair: John Jelonnek				
14:00	14:30	00:30	Franco Gandini	Status of the ITER Electron Cyclotron Heating & Current Drive System
14:30	14:50	00:20	Paco Sanchez	Metrology techniques for the verification of the alignment of the EU gyrotron prototype for ITER
14:50	15:10	00:20	Zisis Ioannidis	Report of recent experiments with the European 1 MW, 170 GHz CW and SP prototype gyrotrons for ITER
15:10	15:30	00:20	Vipal Rathod	Developments towards 1MW Gyrotron Test Facility at ITER-India
15:30	15:50	00:20	Coffeebreak	
16:00	16:10	00:10	Bus to IPP	
16:15	18:00	01:45	Visit W7-X	
18:00	21:00	03:00	Welcome Reception (IPP)	
21:00	21:10	00:10	Bus to city centre	

Tuesday, 15.05.2018

start	end	duration	Who	Title
S4: ECH: Gyrotron Development				
chair: Burkhard Plaum				
09:00	09:30	00:30	James Anderson	Design and Performance Analysis of Microwave Components for ECH an ECE Applications at General Atomics: Current Status and Future Direction
09:30	09:50	00:20	Grigory Denisov	New Developments of Megawatt Power Gyrotrons in Russia
09:50	10:10	00:20	John Jelonnek	Towards Advanced Fusion Gyrotrons: 2018 Update on Activities within EUROfusion
10:10	10:30	00:20	Fabian Wilde	Measurements of Satellite Mode Activity and Automated Mode Recovery in 140 GHz Wendelstein 7-X Gyrotrons
10:30	10:50	00:20	Coffeebreak	
S5: ECH Components				
chair: Gregory Denisov				
10:50	11:20	00:30	Handong Xu	Recent progress of the development of a long pulse 140GHz ECRH system on EAST
11:20	11:40	00:20	Alexander Zach	In-situ real-time monitoring of spurious modes in HE11 transmission lines using multi-hole couplers in miter bends
11:40	12:00	00:20	Torsten Stange	Commissioning and first plasma operation of two remote steering launchers at Wendelstein 7-X
12:00	12:20	00:20	Burkhard Plaum	Development of reflection gratings for advanced ECRH scenarios
12:20	14:00	01:40	Lunch	
S6: Diagnostics: CTS				
chair: Shin Kubo				
14:00	14:30	00:30	Søren Bang Korsholm	Design and development of the ITER CTS diagnostic
14:30	14:50	00:20	Dmitry Moseev	First collective Thomson scattering results from Wendelstein 7-X
14:50	15:10	00:20	Teruo Saito	Developments for collective Thomson scattering equipment with a sub-THz gyrotron in LHD
15:10	15:30	00:20	Stephen Cauffman	Adaption of a Dual-Frequency 104/140 GHz Gyrotron for Operation at 175 GHz
15:30	15:50	00:20	Coffeebreak	
15:50	17:50	02:00	Poster Session 1	

Poster Session 1

Poster Nr.	Author	Title
Tue 1	Avramidis	Studies towards an upgraded 1.5 MW gyrotron for W7-X
Tue 2	Brunner	O2 ECRH as a reliable high-performance scenario for W7-X
Tue 3	Caughman	Electron Heating and Particle Trapping in the Proto-MPEX Linear Device
Tue 4	Cengher	Protection of the DIII-D Vessel, Diagnostics and Windows from Microwaves Injected by the ECH/ECCD System
Tue 5	Ell	Conceptual design and simulation of a gyrotron multistage depressed collector based on ExB drift
Tue 6	Huang	Recent upgrade and results of ECRH systems on HL-2A
Tue 7	Illy	Recent Status and Future Prospects of Coaxial-Cavity Gyrotron Development at KIT
Tue 8	Jin	Improved Simulation of Quasi-Optical Launchers with Smoothing Algorithm for High Power Gyrotrons
Tue 9	Kobayashi	Development of ECH/CD system and preparation toward first plasma of JT-60SA
Tue 10	Kumar	Comparative studies of various types of transmission lines in the frequency range 70GHz -1THz for ITER ECE diagnostic
Tue 11	Lechte	Simulation of Polarising and Reflecting Gratings for High Power mm Waves
Tue 12	Lohr	Performance, Plans, and Experiments for the ECH System on DIII-D
Tue 13	Marsen	Stray radiation in Wendelstein 7-X - Experience from the first experimental campaigns
Tue 14	Oosterbeek	Impact of non-absorbed ECH power on the Michelson Interferometer spectrum at W7-X
Tue 15	Pagonakis	Overview on recent progress in magnetron injection gun theory and design for high power gyrotrons
Tue 16	Rathod	Developments towards 1MW Gyrotron Test Facility at ITER-India
Tue 17	Ruess	Theoretical Study on the Operation of the EU/KIT TE34,19-Mode Coaxial Cavity Gyrotron at 170/204/238 GHz
Tue 18	Tang	Conceptual design of CFETR ECRH equatorial launcher and upper launcher
Tue 19	Wang	Research activities and progress on the long pulse ECRH launcher for EAST
Tue 20	Xia	Plans for the electron cyclotron heating system on J-TEXT
Tue 21	Zanini	ECCD operations in the second experimental campaign at W7-X
Tue 22	Zhang	Study on the Soft-start process of PSM high voltage power supply for ECRH
Tue 23	Allen	Design of the Synthetic Aperture Microwave Imager Upgrade for measurement of the edge current density on MAST-U

Wednesday, 16.05.2018

start	end	duration	Who	Title
S7: Diagnostics: ECE and Imaging				
chair: Max Austin				
09:00	09:30	00:30	Viktor Udintsev	Progress in ITER ECE Diagnostic Design and Integration
09:30	09:50	00:20	Liu Yong	Overview of the ECE measurements on EAST
09:50	10:10	00:20	Roddy Vann	Measurements of edge magnetic pitch angle on MAST & NSTX-U using the Synthetic Aperture
10:10	10:30	00:20	Min Jiang	Development of ECE/ECEI diagnostics and multi-scale transport study on HL-2A tokamak
10:30	10:50	00:20	Coffeebreak	
S8: Diagnostics: Scattering and Emission				
chair: Daniela Farina				
10:50	11:20	00:30	Timothy P. Goodman	Experimental study of high power mm-waves scattering by plasma turbulence in TCV and TORPEX
11:20	11:40	00:20	Stefan Kragh Nielsen	Overview of experimental observations of parametric decay of mm-waves in fusion plasmas
11:40	12:00	00:20	Alessandro Bruschi	Side Emissions during EC Injection for PDI Studies in FTU Tokamak
12:00	12:20	00:20	Alf Köhn	The deteriorating effect of plasma density fluctuations on microwave beam quality
12:20	13:00	00:40	packed Lunch	
13:15	14:00	00:45	Bus to Stralsund	
14:00	17:00	03:00	Guided tour Ozeaneum	
17:15	18:00	00:45	Bus to Greifswald city centre	
19:00	22:00	03:00	Dinner at Theatercafé	

Thursday, 17.05.2018

start	end	duration	Who	Title
S9: Diagnostics: Physics and Modelling				
chair: John Lohr				
09:00	09:30	00:30	Simon Freethy	Advances in turbulence measurements using new Correlation ECE and nT-phase diagnostics at ASDEX Upgrade
09:30	09:50	00:20	Alexander Creely	Measurement of Perturbative Thermal Diffusivity with Partial Sawtooth Heat Pulses on Alcator C-Mod and ASDEX Upgrade
09:50	10:10	00:20	Udo Höfel	Bayesian modelling of ECE calibration and measurements at Wendelstein 7-X
10:10	10:30	00:20	Nikolai Marushchenko	Mixed Scenarios with X3 heating in W7-X
10:30	10:50	00:20	Coffeebreak	
S10: Theory and Modelling				
chair: Emanuele Poli				
10:50	11:20	00:30	Daniela Farina	Nonlinear collisionless Electron Cyclotron interaction in the pre-ionisation stage
11:20	11:50	00:30	Alexei Popov	Anomalous absorption and backscattering in ECRH experiments due to parametric low-threshold excitation of localized UH waves
11:50	12:10	00:20	Pavel Aleynikov	3D Full-Wave modelling and EC mode conversion in Wendelstein 7-X
12:10	12:30	00:20	Atsushi Fukuyama	Kinetic full wave analysis of O-X-B mode conversion in tokamak plasmas
12:30	14:00	01:30	Lunch	
14:00	16:00	02:00	Poster Session 2	
16:00	16:30	00:30	Coffeebreak	
Summary Sessions				
16:30	16:50	00:20	Abhay Ram	Theory
16:50	17:10	00:20	Young-soon Bae	ECRH-Experiment
17:10	17:30	00:20	Hans Oosterbeek	Diagnostics
17:30	17:50	00:20	John Jelonnek	Technology
17:50	18:00	00:10	Emanuele Poli	Closing ceremony

Poster Session 2

Poster Nr.	Author	Title
Thur 1	Abramovic	Collective Thomson Scattering in Non-Axisymmetric Plasmas with Absorption
Thur 2		
Thur 3	Austin	Emissivity measurements of SiC and Carbon with the DIII-D Michelson interferometer
Thur 4	Bae	Study of off-axis current drive using EC top-launch in KSTAR
Thur 5	Chaudhary	Investigation of optically grey electron cyclotron harmonics in Wendelstein 7-X
Thur 6	Chen	Top Launch for Higher Off-axis Electron Cyclotron Current Drive
Thur 7	Farník	Runaway electron diagnostics for the COMPASS tokamak using EC emission
Thur 8	Goto	Research of the Electron Cyclotron Emission with Vortex Property from Multi Electrons
Thur 9	Hansen	Observation and Modelling of the Onset of Parametric Decay Instabilities during Gyrotron Operation at ASDEX Upgrade
Thur 10	Hirsch	ECE Diagnostic and Measurements during initial Operation of Wendelstein 7-X
Thur 11	Kubo	Study of sub-Tera-Hz gyrotron scattering for a direct detection of EBW in QUEST
Thur 12	Liu	Intense intermittent radiation at the plasma frequency on EAST
Thur 13	Micheletti	EC absorption efficiency in ITER at one-third nominal magnetic field strength
Thur 14	Minashin	Effect of multipass absorption of external electron cyclotron radiation at the initial stage of ITER discharges
Thur 15	Minashin	Modelling of electron cyclotron resonance heating and current drive in the T-15-MD tokamak
Thur 16	Poli	Fast evaluation of the ECCD efficiency for reactor studies
Thur 17	Ram	Current drive by high intensity, pulsed, electron cyclotron wave packets
Thur 18	Sabot	Development of an Electron Cyclotron Emission Imaging diagnostic on the WEST tokamak
Thur 19	Senstius	Particle-in-cell simulations of parametric decay instabilities near the upper hybrid layer
Thur 20	Vanovac	Characterization of MHD modes with ECE(-I) and the influence of large density fluctuations
Thur 21	Weir	Development of a Poloidal Correlation ECE Diagnostic for Electron Temperature Fluctuation Measurements on W7-X
Thur 22	Weir	Development of a Correlation ECE Radiometer for Electron Temperature Fluctuation Measurements in Heliotron J
Thur 23	Yanagihara	Extension of a ray tracing for polarized diffracting wave beams description in inhomogeneous magnetized plasmas