

Sunday 14.07.2019

18:00 21:00 **Registration** *Opole University, ul. Oleska 48 (main hall), 45-52 Opole*

Monday 15.07.2019

08:00 09:00 **Registration** *building of, Self-Government of the Opole Voivodeship, Piastowska 14, 45-082 Opole*

09:00 09:15 **Opening ceremony**

Session 1 *chair: R. Zagórski*

09:15 10:00 **Invited lecture 1** *A.J.H. Donné, Progress in European fusion research*

10:00 10:25 **Oral presentation 1** *M. Jakubowski, Results from first divertor campaign at Wendelstein 7-X*

10:25 10:55 **Coffee break**

Session 2 *chair: M. Sadowski*

10:55 11:40 **Invited lecture 2** *D. Campbell, Challenges in burning plasma physics*

11:40 12:05 **Oral presentation 2** *T. Pisarczyk, Complex interferometry to optimize the operation of the capacitor coil targets for laser-driving of strong magnetostatic fields*

12:05 14:05 **Lunch break**

Session 3 *chair: K. Nowakowska-Langier*

14:05 14:50 **Invited lecture 3** *M. Kubkowska, Pulse Height Analysis diagnostic for impurity behaviour studies at W7-X*

14:50 15:20 **Oral presentation 3** *P. Gąsior, Laser Induced Breakdown Spectroscopy (LIBS) as diagnostics for plasma-wall interactions monitoring in tokamaks*

15:20 16:00 **Coffee break**

Session 4 *chair: M. Rubel*

16:00 16:45 **Invited lecture 4** *A. Litnovsky, Advanced materials for a fusion power plant.*

Oral presentation 4 *A. Aliverdiev, Some peculiarities of laser shocks propagation in foam-solid targets*

16:45 17:10

18:00 19:00 **Visiting Polish Song Museum**

19:00 21:30 **Welcome reception** *+ concert of Jarosław Wasik*

Tuesday 16.07.2019

08:30 09:00 **Office hours**

Session 5 *chair: S. Masuzaki*

09:00 09:45 **Invited lecture 5** *R. Burhenn, Progress in the operation of the W-7X stellarator*

09:45 10:10 **Oral presentation 5** *T. Fornal, Estimation of the radiance flux of the Lyman- α lines of the hydrogen-like ions of light elements emitted from the W7-X plasmas*

10:10 10:40 **Coffee break**

Session 6 *chair: R. Burhenn*

10:40 11:25 **Invited lecture 6** *S. Masuzaki, Investigation of isotope effects on fusion experimental plasmas in LHD heliotron*

11:25 11:50 **Oral presentation 6** *W. Gromelski, Evolution of electron temperature and density in carbon plasma induced by nanosecond laser dual pulses*

11:50 13:50 **Lunch break**

Session 7 *chair: T. Pisarczyk*

13:50 14:35 **Invited lecture 7** *J. Krasa, Laser-target experiments at PALS*

14:35 15:00 **Oral presentation 7** *P. Rączka, Target charging, strong electromagnetic pulse emission and proton acceleration from thin foils at the 10 TW IPPLM fs laser facility*

15:00 15:30 **Coffee break**

15:30 18:00 **Poster session**

21:00 00:00 **Lunar eclipse observation** *Astro. observatory - roof of the student hostel 'Niechcic'*

Wednesday 17.07.2019

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| 08:30 | 09:00 | Office hours | |
| | | Session 8 | chair: K. Dzierżęga |
| 09:00 | 09:45 | Invited lecture 8 | <i>O. Marchuk, In-situ determination of surface characteristics by optical emission spectroscopy</i> |
| 09:45 | 10:10 | Oral presentation 8 | <i>I. Książek, DBD source for study of molecular spectra observed in a magnetic confinement fusion devices</i> |
| 10:10 | 10:40 | Coffee break | |
| | | Session 9 | chair: T. Pisarczyk |
| 10:40 | 11:25 | Invited lecture 9 | <i>A. Widdowson, Overview of material migration and its impact on diagnostic components in the JET tokamak with ITER-Like Wall</i> |
| 11:25 | 11:50 | Oral presentation 9 | <i>M. Rubel, Beryllium and Tungsten Dust Studies in JET with the ITER-Like Wall: An Overview</i> |
| 11:50 | 13:50 | Lunch break | <i>chair: S. Tsikata</i> |
| | | Session 10 | chair: S. Tsikata |
| 13:50 | 14:35 | Invited lecture 10 | <i>K. Nowakowska-Langier, Application of pulsed plasma in shaping the materials structure</i> |
| 14:35 | 15:00 | Oral presentation 10 | <i>A. Szelecka, Comparison of Hall thruster ion current angular distributions acquired by Faraday cup and Faraday probe</i> |
| 15:00 | 15:30 | Coffee break | |
| | | Session 11 | chair: E. Pawelec |
| 15:30 | 16:15 | Invited lecture 11 | <i>S. Tsikata, Combining insights from coherent and incoherent Thomson scattering in propulsion plasmas</i> |
| 16:15 | 16:40 | Oral presentation 11 | <i>M. Jakubczak, Magnetic field topography effect on Hall Thruster discharge at low and high voltage</i> |
| 18:00 | | Departure of the bus for conference dinner | <i>Parking spot by the 'Polish Song Museum'</i> |
| 19:00 | 22:00 | Conference dinner | <i>Moszna Castle (+ sword fighting presentation and fire show)</i> |

Thursday 18.07.2019

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| 08:30 | 09:00 | Office hours | |
| | | Session 12 | chair: A. Widdowson |
| 09:00 | 09:45 | Invited lecture 12 | <i>E. Moreau, Electroaerodynamic phenomena in atmospheric corona discharges – Applications to airflow control and electric propulsion</i> |
| 09:45 | 10:10 | Oral presentation 12 | <i>J. Żebrowski, Optimization of detectors' radiators for studies of fast electrons within tokamaks</i> |
| 10:10 | 10:40 | Coffee break | |
| | | Session 13 | chair: O. Marchuk |
| 10:40 | 11:05 | Oral presentation 13 | <i>K. Dzierżęga, Study of Stark broadened Balmer series spectral lines of hydrogen in laser induced plasma</i> |
| 11:05 | 11:30 | Oral presentation 14 | <i>A. Bartecka, Stark-broadening studies of the N I multiplet $3p^4 P^{\circ} - 3d^4 D$ at 1052.630 nm</i> |
| 11:30 | 13:00 | Lunch break | |
| 13:00 | 18:00 | Excursion | <i>a) X-ray tubes museum; b) Krasiejów excavation site and dinosaur park</i> |

Friday 19.07.2019

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| 08:30 | 09:00 | Office hours | |
| | | Session 14 | chair: I. Książek |
| 09:00 | 09:45 | Invited lecture 13 | <i>E. Lerner, First results from a plasma focus with beryllium electrodes</i> |
| 09:45 | 10:10 | Oral presentation 15 | <i>M. Sadowski, Recent achievements of plasma studies within PF-1000U facility</i> |
| 10:10 | 10:40 | Coffee break | |
| | | Session 15 | chair: E.Lerner |
| 10:40 | 11:05 | Oral presentation 16 | <i>Ł. Marciniak, Initial results of plasma radiative compression investigation in the PF-24 device operated with D2, Ar and D2-x%Ar admixtures</i> |
| 11:05 | 11:30 | Oral presentation 17 | <i>J. Domański, Generation of ion beams from a high-Z target irradiated by a laser pulse of ultra-relativistic intensity</i> |
| 11:30 | 11:45 | Closing ceremony | |