

**DETAILED PROGRAMME**

<b>Monday 08/09/25</b>	
08:00 – 09:00	<b>Registration on site</b> (III floor, Amphitheatre No. 661)
<b>Opening Session / Chairs: D. Margarone and D. Batani</b> (III floor, Amphitheatre No. 661)	
09:00 – 09:10	Welcome from the IGPC general manager and LOC
09:10 – 09:15	Welcome from the SC Chair and ProBono Chair
09:20 – 09:30	Presenting the outline of the workshop programme
09:30 – 10:10	<b>Fusion Energy at the Cross Roads (INV2)</b> <i>D.H.H. Hoffmann</i>
10:10 – 10:35	<b>Nuclear Fusion Power Reactor Concept Proposed for Laser-Driven Proton-Boron (HB11) Fusion (O23)</b> <i>I.C.E. Turcu</i>
10:35 – 11:00	<i>Coffee Break</i>
11:00 – 11:25	<b>A Commercially Viable High-Efficiency Thulium-Based Laser System for Proton Boron Fusion Power Plants (O14)</b> <i>S. Saha, C. Pflaum, W. M. Lee, N. Metzger</i>
11:25 – 11:50	<b>Boron Hydrides: A Fuel of Choice for p-B Fusion? Part II (O10)</b> <i>M. G. S. Londesborough, M. Ehn, J. Bould, M. Krüs</i>
11:50 – 12:15	<b>Monte Carlo Simulations of Suprathermal Enhancement in Advanced Nuclear Fusion Fuels (O2)</b> <i>M. Borszcz, P. Burr, I. Morozov, S. Pikuz</i>
12:15 – 12:40	<b>Hydrogen Boron ignition using specific fusion fuel composition in MIF configuration (O16)</b> <i>S. Moustazis, C. Daponta, N. Nissim, S. Eliezer, Z. Henis, P. Lalousis, Y. Schweitzer and É. Berthoumieux</i>
12:40 – 14:00	<i>Lunch Break (V floor/29)</i>
<b>Session I / Chair: E. Turcu</b> (III floor, Amphitheatre No. 661)	
14:00 – 14:40	<b>Designing hydrogen (deuterium)- and boron-rich targets for laser-driven proton-boron fusion (INV1)</b> <i>U.B. Demirci</i>
14:40 – 15:05	<b>Laser structuring of titanium-based alloy and metallic thin films under controlled atmospheric conditions (O15)</b> <i>D. Milovanović, B. Rajčić, A. Kovačević, B. Gaković, B. Stankov, S. Dimitrijević, S. Petronić</i>
15:05 – 15:30	<b>Electron driven reactive processes involving H<sub>2</sub><sup>+</sup>, BeH<sup>+</sup> and their isotopologues in plasma fusion (O18)</b> <i>N. Pop, E. Djuissi, J. Boffelli, R. Hassaine, J. Zs Mezei, K. Chakrabarti, I. F. Schneider</i>
15:30-15:55	<b>Production and Characterization of Boron-doped foams for Proton-Boron Fusion Applications (O6)</b> <i>M. Kamislioglu, F. Consoli, K. Batani, D. Batani, M. Ciprian, S. Ipek Karaaslan, B. Buyuk</i>
17:00 – 18:00	<b>Welcome cocktail</b> (III floor / Blue hall)

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<b>Tuesday 09/09/2025</b>	
<b>Session II / Chairs: D. Hoffman and D. Margarone</b> (III floor, amphitheatre No. 661)	
09:00 – 09:40	<b>Physics model of spherical torus p-<sup>11</sup>B plasma with superior confinement and fusion reaction rates (INV6)</b> <i>Y.-K.M. Peng, B. Liu, Y. Shi, A. Ishida, W. Liu, T. Sun, D. Guo, Z. Li, D. Luo, X. Xiao, H. Huang, G. Zhao, J. Dong, M. Liu, and the ENN Fusion Team</i>
09:40 – 10:05	<b>Progress of p-<sup>11</sup>B Research for Fusion Energy at ENN (O9)</b> <i>B. Liu, Z. Li, D. Luo, X. Xiao, H.R. Huang, G.C. Zhao, Y.S. Zhang, R. Cheng, Y.T. Zhao, Y.J. Shi, D.K. Yang, Y.C. Li, W. Yang, H.S. Xie, T.T. Sun, W.J. Liu, H.Z. Kong, Y.Y. Li, H.Y. Wu, Z.H. Li, T.S. Fan, D. Wu, S.J. Liu, Y.C. Liu, D. H.H. Hoffmann, J.Q. Dong, Y.-K.M. Peng, M.S. Liu</i>
10:05 – 10:30	<b>Investigation of advanced laser-driven proton sources produced by the interaction of relativistic laser pulse with low density foams and their applications to proton-boron fusion (O12)</b> <i>G. Malka, D. Batani, J. Commenge, H. Larreur, L. Giuditta Pavan, A. Milani, A. Moroz, D. Raffestin, S. Busch, A. Martynenko, O. Rosmej, P. Tavana, K. Zarouk, D. Hoffman, E. Filippov, A. Huerta, L. Volpe, Y. Ferber, N. Nissim, M. Alonzo, F. Consoli, C. Verona, B. Grau, M. Sciscio, K. Batani, W. Kang, D. Margarone, M. Tosca, S. Pikuz, A. Raso, B. Liu</i>
10:30 – 11:00	<i>Coffee Break</i>
11:00 – 11:25	<b>High-yield and high energy protons in proton–boron reactions with pitcher–catcher configuration in nanosecond laser systems (O4)</b> <i>F. Abubaker, G. Petringa, C. Verona, M. Alonzo, S. Arjmand, E. Domenicone, B. Grau, N. Macaluso, A.M. Raso, M. Scisciò<sup>3,5</sup>, G. Cantone, L. Guardo, G. Messina, C. Altana, La. Cognata, E. Pagano, G. Rapisarda, D. Santonocito, S. Agarwal, M. Cervenak, D. Bortot, R. Catalano, C. Ciampi, M. Cipriani, P. Devi, R. Dudzak, D. Ettl, P. Gajdos, L. Giuffrida, L. Juha, J. Krasa, M. Krupka, M. Krus, L. Malferrari, D. Margarone, S. Mirabella, G. Morello, A. D. Pappalardo, A. Picciotto, R. Rinaldi, M. Rosinski, A. Scandurra, S. Singh, P. Tchórz, A. Trifirò, F. Consoli and G. A. P. Cirrone</i>
11:25 – 11:50	<b>Laser-driven high-repetition-rate fusion reactions at the ELI-Beamlines laser facility (O21)</b> <i>M. Scisciò, M. Alonzo, E. Domenicone, B. Grau, M. R. D. Rodrigues, G. Petringa, A. Bonasera, R. Catalano, S. Agarwal, P. L. Andreoli, D. Batani, K. Batani, J. Cikhart, M. Cipriani, G. A. P. Cirrone, G. Claps, F. Cordella, G. Cristofari, V. De Leo, E. Di Ferdinando, D. Dubresson, L. Giuffrida, F. Grepl, A. Hadjikyriacou, V. Istokskaia, V. Kantarelou, D. Klir, M. Krupka, M. D. Lattuada, D. Margarone, S. Moustazis, M. Nocente, D. Pacella, A. Růžicka, F. Schillaci, M. Sestak, S. Singh, T. Slavicek, M. Tryus, A. Velyhan, C. Verona, M. Veselsky, F. Consoli</i>
11:50 – 12:15	<b>Hydrogen boron fusion in confined geometries (O1)</b> <i>D. Batani, M. Tosca, L. Giuffrida, P. Nicolai, C. Caizergues, D. Margarone, D. Raffestin, E. Filippov, S. Pikuz, K. Batani, Q. Cai, S. Mateti, Y. (I.) Chen, K. Yamanoi, A. Morace</i>
12:15 – 12:40	<b>Cavity Pressure Acceleration in laser-induced, mixed-fuel fusion reactions (O22)</b> <i>P. Tchórz, T. Chodukowski, S. Borodziuk, M. Rosinski, M. Cipriani, Z. Rusiniak, R. Dudzak, M. Krupka, J. Cikhart, T. Burian, S. Singh, M. Szymanski, A. Marchenko, M. Kustos, S. Agarwal, J. Krasa, R. Swierczynski, J. Pokorska, T. Pisarczyk, D. Klir, J. Skala, J. Dostal, M. Krus and L. Juha</i>
12:40 – 14:00	<i>Lunch Break (V floor/29)</i>

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<b>Session III / Chair: K. Batani</b> <i>(III floor, Amphitheatre No. 661)</i>	
<i>14:00 – 14:40</i>	<b>Initial Experiments With Decaborane in a Dense Plasma Focus (INV3)</b> <i>E.J. Lerner, S. Hassan, I. Karamitsos, and R. Fritsch</i>
<i>14:40 – 15:05</i>	<b>Potential of Low Gain Avalanche and SiC Detectors for Plasma Diagnostics in p-<sup>11</sup>B Fusion Experiments (O13)</b> <i>M. Manojlovic, N. Moffat, P. Fernández-Martínez, E. Cabruja, C. Fleta, M. Perez, G. Laštovička-Medin, G. Pellegrini, S. Hidalgo</i>
<i>15:05 – 17:00</i>	<b>Poster Session / Coffee Break</b> <i>(III floor, Hall of the Amphitheatre No. 661)</i>
<i>17:00 –</i>	<b>Guided walking tour to Belgrade fortress and Kalemegdan</b> <i>(starting at the Workshop venue)</i>

**DETAILED PROGRAMME**

<b>Wednesday 10/09/2025</b>	
<b>Session IV / Chairs: D. Davino and M. G. S. Londesborough</b> (III floor, Amphitheatre No. 661)	
09:00 – 09:40	<b>Numerical simulations of ignition and fusion burn wave propagation in proton-boron fuel (INV5)</b> <i>I. Morozov</i>
09:40 – 10:05	<b>Interaction of Laguerre-Gaussian laser pulses with borane targets for axial magnetic field generation (O19)</b> <i>L. Reichwein, A. Pukhov, and M. Büscher</i>
10:05 – 10:30	<b>Numerical simulation of proton-boron fusion via Micro Bubble Implosion (O3)</b> <i>V. Ciardiello, D. Davino, V.P. Loschiavo</i>
10:30 – 11:00	<i>Coffee Break</i>
11:00 – 11:25	<b>Optimizing proton–boron-11 fuel for fast ignition inertial fusion applications (O5)</b> <i>E. Ghorbanpour, I. Morozov, S. Pikuz, F. Ladouceur</i>
11:25 – 11:50	<b>Investigation of Laser driven proton-boron reaction in Pitcher-Catcher configuration: CR39 and activation measurements with Monte Carlo validation (O11)</b> <i>N. Macaluso, G. Petringa, F. Abubaker, L. Guardo, M. La Cognata, E. Pagano, G. Rapisarda, D. Santonocito, S. Agarwal, M. Alonzo, C. Altana, S. Arjmand, D. Bortot, G. Cantone, R. Catalano, M. Cervenak, C. Ciampi, M. Cipriani, G. A. P. Cirrone, F. Consoli, P. Devi, E. Domenicone, R. Dudzak, D. Ettl, P. Gajdos, B. Grau, L. Giuffrida, J. Krasa, M. Krupka, M. Krus, L. Juha, L. Malferrari, D. Margarone, G. Messina, S. Mirabella, G. Morello, A. D. Pappalardo, A. Picciotto, A.M. Raso, R. Rinaldi, M. Rosinski, M. Scisciò, A. Scandurra, S. Singh, P. Tchórz, A. Trifirò and C. Verona</i>
11:50 – 12:15	<b>Characterization of Charge Collection, Signal Timing and Radiation Defects in 3D Silicon Sensors Using Two-Photon (2PA) and Three-Photon (3PA) Transient Current Technique (TCT) for Advanced Timing Applications in Laser-Driven pB Fusion (O7)</b> <i>G. Lastovicka-Medin, M. Rebarz</i>
12:15 – 13:30	<i>Lunch Break (V floor/29)</i>
13:00-13:30	<b>PROBONO / Core Group Meeting (closed)</b> (III floor, Amphitheatre No. 661)
<b>MC meeting / Chair: Katarzyna Batani</b>	
13:30 – 15:30	<b>PROBONO / Management Committee Meeting (closed)</b> (III floor, Amphitheatre No. 661)
15:40-17:00	<b>Nikola Tesla Museum visit Group I</b> (Krunska 51, Belgrade)
16:40-18:00	<b>Nikola Tesla Museum visit Group II</b> (Krunska 51, Belgrade)
19:00	<b>Conference dinner</b> (Caruso Restaurant, Terazije 23/8, Belgrade)

**DETAILED PROGRAMME**

<b>Thursday 11/09/2025</b>	
<b>Session V / Chairs: P. Tchórz and D. Milovanović</b> (III floor, Amphitheatre No. 661)	
09:00 – 09:40	<b>The proton-boron fusion reaction enhances <i>in-vitro</i> cancer cell death (INV4)</b> <i>L. Manti</i>
09:40 – 10:05	<b>Laser-Driven Ultrahigh Compression of Matter and Application to Proton-Boron Fusion (O17)</b> <i>M. Murakami</i>
10:05 – 10:30	<b>Radioisotopes production using lasers: from basic science to applications (O20)</b> <i>M. R. D. Rodrigues, A. Bonasera, M. Scisciò, J. A. Pérez-Hernández, M. Ehret, F. Filippi, P. L. Andreoli, M. Huault, H. Larreur, D. Singappuli, D. Molloy, D. Raffestin, M. Alonzo, G. G. Rapisarda, D. Lattuada, G. L. Guardo, C. Verona, Fe. Consoli, G. Petringa, A. McNamee, M. La Cognata, S. Palmerini, T. Carriere, M. Cipriani, G. Di Giorgio, G. Cristofari, R. De Angelis, G. A. P. Cirrone, D. Margarone, L. Giuffrida, D. Batani, P. Nicolai, K. Batani, R. Lera, L. Volpe, D. Giulietti, A. Alejo, S. Agarwal, M. Krupka, S. Singh, F. Schillaci, M. Tryus, S. Stancek, V. Kantarelou, B. Grau', D. Dubresson, E. Domenicone, M. Nocente, T. Slavicek, M. Veselsky, F. Consoli</i>
10:30 – 11:00	Coffee Break
11:00 – 11:25	<b>Characterization of boron irradiated by laser-driven protons in high-repetition-rate petawatt-range experiments by laser induced breakdown spectroscopy (O8)</b> <i>V. Lazić, S. Almaguer, M. Scisciò, M. Alonzo, B. Grau, M. R. D. Rodrigues, G. Petringa, A. Bonasera, R. Catalano, E. Domenicone, P. L. Andreoli, D. Batani, K. Batani, M. Cipriani, G. A. P. Cirrone, G. Cristofari, E. Di Ferdinando, D. Dubresson, L. Giuffrida, D. Margarone, M. Nocente, F. Schillaci, M. Tryus, C. Verona, and F. Consoli</i>
11:25 – 12:00	PROBONO wrap-up
<b>Closing Session</b> <b>Chairs: K. Batani and D. Milovanović</b> (III floor, Amphitheatre No. 661)	
12:00 – 12:15	<b>Closing session</b>
12:15 – 13:30	<b>Lunch (V floor/29)</b>