

International Committee on Ultrahigh Intensity Lasers - September 2020 Report to IUPAP

On behalf of the committee and as Chairman of the International Committee on Ultrahigh Intensity Lasers (ICUIL), I submit this report of ICUIL-related activities and events over the past 13 months to IUPAP. Obviously the biggest news in this time period has been the global Covid-19 pandemic. While the ICUIL is happy to report that we are not aware of any illness effecting directly the members of its committee, the pandemic has certainly effected the operations and activities of the committee. The late summer of the even number years is the general meeting time of the International Conference on Ultrahigh Intensity Lasers which is sponsored and organized by ICUIL (the committee). ICUIL 2020 was scheduled to be held on Jeju Island in South Korea. The host organization for the meeting was to be the Guangju Institute of Science and Technology which is the home of one of the premier ultrahigh intensity laser facilities in the world today. In early spring the organizing committee decided to postpone the meeting and move the dates from early September 2020 to June of 2021.

<https://ibs-conference.org/2021/icuil/>.



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| Overview | Overview |
| Program Committee | |
| Program | The IBS Conference on Ultrahigh Intensity Lasers, also the 9th Conference of The International Committee on Ultrahigh Intensity Lasers(ICUIL 2020) , is held in Jeju island in Korea from 13 th to 18 th June 2021. |
| Oral and Poster Presentation | |
| Invited Speakers | |
| Important Dates | |
| Abstract Submission | |
| Registration | |
| Venue & Accommodation | |
| Sponsors | |
| Contact and support | |
| | Topics |
| | <ul style="list-style-type: none">• Ultra-intense laser design and performance Nd:glass-based, Ti:sapphire, DPSSL and OPCPA and novel architectures• Novel technologies for ultra-intense lasers Compression components and strategies, modelling and fabrication, high damage -threshold and ultra-broadband laser components, pulse control, and diagnostics• Applications of ultra-intense lasers Laser acceleration, short-wavelength sources, attosecond sources, exploration of warm-dense matter, high-field physics and more |
| | Organizers |
| | Conference chair: Chang Hee Nam (CoReLS, IBS) Conference co-chair: Chris P. J. Barty (Univ. California, Irvine) |

However, at the most recent meeting of the ICUIL board, it was decided that the present world conditions do not provide enough clarity to warrant proceeding with the 2021 date. The ICUIL 2020 meeting will now become the ICUIL 2022 meeting and will be scheduled for September 2022 at the same general location. It is not clear if the specific venue will remain the same.

The occasion of the ICUIL 2020 meeting was also to have marked a change in leadership of the ICUIL committee. Both myself as chair and Prof. Alexander Sergeev and Prof. Ravi Kumar as co-chairs have intended to step down. In preparation of this event in the fall of 2019 the general assembly of ICUIL was polled with respect to future chairs and co-chairs. The results of those polls suggested that Prof. Dino Jaroszynski (present ICUIL treasurer) of Stathclyde University in Scotland, Dr. Catherine LeBlanc of LULI in France and Dr. Chang Hee Nam of the Guangju Institute of Science and Technology in South Korea would assume roles as chair and co-chairs respectively. The transition was to have taken place at the conclusion of the committee meeting at the conclusion of the ICUIL 2020 conference in Jeju. With the postponement of the ICUIL conference until 2021, the transition was similarly postponed. However with the new postponement of the conference until 2022, the present plan is to transition leadership with the start of the 2021 year. Electronic approval by the ICUIL committee will be sought this fall. I as co-chair of the ICUIL 2022 conference will remain significantly involved in the committee activities until the conclusion of the 2022 meeting.

In other community related news, the \$B Extreme Light Infrastructure projects in the Czech Republic, Romania and Hungary have all made good progress over the past year and each is looking to establish user operations. In Romania, two new 10 petawatt laser systems were recently demonstrated. Each represents a world leading capability with respect to laser peak power. In preparation for user operations, a new governing entity called the ELI - European Research Infrastructure Consortium (ELI-ERIC) was officially established. The role of the ELI-ERIC is to provide a central clearing house for user proposal submissions, evaluations and allocations of beam time and to provide via member country contributions, the funding necessary for facility operations. The ELI enterprise was constructed using European infrastructure funds which cannot be used for operations. The ELI-ERIC consists presently only of the ELI-BEAMLINES facility in the Czech Republic and the ELI-ALPS facility in Hungary. It is hoped with the recent demonstration of record laser capabilities at ELI-NP, that the facility will be invited to be part of the ELI-ERIC. Support of IUPAP for such inclusion might be beneficial.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. P. J. Barty', with a stylized flourish extending from the end.

Professor C. P. J. Barty

Chairman, ICUIL