

# The 13th Japan-US Workshop on Heavy Ion Fusion and High Energy Density Physics, ILE Osaka, Japan, 12-14 October 2011

Organized by Research Laboratory for Nuclear Reactors, Tokyo Institute of Technology

| Date                | Session                            | Chair                         | from  | to    | Duration | Speaker                                     | Title                                                                                                        |
|---------------------|------------------------------------|-------------------------------|-------|-------|----------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 12 October<br>(WED) | Opening                            | <div></div>                   | 13:30 | 13:35 | 0:05     | Masakatsu Murakami (ILE)                    | Welcome Address (1)                                                                                          |
|                     |                                    |                               | 13:35 | 13:40 | 0:05     | Yoshiyuki Oguri (Tokyo Tech)                | Opening                                                                                                      |
|                     | Overview                           | Peter Seidl (LBNL)            | 13:40 | 14:20 | 0:40     | Takashi Kikuchi (Nagaoka Univ. of Technol.) | Activities for Heavy Ion Inertial Fusion and High Energy Density Science on Nagaoka University of Technology |
|                     |                                    |                               | 14:20 | 15:05 | 0:45     | John Barnard (LLNL/LBNL)                    | Overview of HIFS VNL Activities in WDM and HIF                                                               |
|                     |                                    |                               | 15:05 | 15:20 | 0:15     | <div></div>                                 | Coffee Break                                                                                                 |
|                     | Special lectures by ILE scientists | Kazuhiko Horioka (Tokyo Tech) | 15:20 | 16:05 | 0:45     | Hiroyuki Shiraga (ILE)                      | Implosion and Heating Experiments of Fast Ignition Targets by GEKKO XII and LFEX Lasers                      |
|                     |                                    |                               | 16:05 | 16:50 | 0:45     | Masakatsu Murakami (ILE)                    | Alternative Ignition and Relevant Topics                                                                     |
|                     |                                    |                               | 16:50 | 17:35 | 0:45     | Takayoshi Norimatsu (ILE)                   | Issues of Laser Fusion Reactor KOYO-Fast                                                                     |

|                     |                                   |                             |       |       |       |                                             |                                                                                                   |
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| 13 October<br>(THU) |                                   |                             | 9:10  | 9:15  | 0:05  | Hiroshi Azechi<br>(ILE)                     | Welcome Address (2)                                                                               |
|                     | Accelerator and<br>beam physics 1 | Ken Takayama<br>(KEK)       | 9:15  | 9:45  | 0:30  | Steven Lund<br>(LLNL/LBNL)                  | Envelope Model for the Propagation of an Intense Proton Beam through Thin Foils                   |
|                     |                                   |                             | 9:45  | 10:25 | 0:40  | Kazuhiko Horioka<br>(Tokyo Tech)            | Beam Physics Study at Tokyo Tech                                                                  |
|                     |                                   |                             | 10:25 | 10:55 | 0:30  | Hong Qin<br>(PPPL)                          | Beam Wobbler System and Dynamic Stabilization of Ablative RTI (Invited)                           |
|                     |                                   |                             |       |       | 10:55 | 11:10                                       | 0:15                                                                                              |
|                     | Accelerator and<br>beam physics 2 | Steven Lund<br>(LLNL/LBNL)  | 11:10 | 11:40 | 0:30  | Taiki Iwashita<br>(KEK)                     | Beam Commissioning of the KEK Digital Accelerator                                                 |
|                     |                                   |                             | 11:40 | 12:10 | 0:30  | Erik Gilson<br>(PPPL)                       | Plasmas Sources for Beam Neutralization in NDCX-I and NDCX-II                                     |
|                     |                                   |                             | 12:10 | 12:40 | 0:30  | Weihoa Jiang<br>(Nagaoka Univ. of Technol.) | Power Devices for Induction Accelerators                                                          |
|                     |                                   |                             | 12:40 | 13:30 | 0:50  |                                             | Lunch at "Minerva"                                                                                |
|                     | Scientific tour                   |                             | 13:30 | 15:00 | 1:30  |                                             | ILE Tour                                                                                          |
|                     |                                   |                             | 15:00 | 15:15 | 0:15  |                                             | (Break + ILE -> RCNP)                                                                             |
|                     |                                   |                             | 15:15 | 16:45 | 1:30  |                                             | RCNP (Research Center for Nuclear Physics) Tour                                                   |
|                     |                                   |                             |       |       | 16:45 | 17:00                                       | 0:15                                                                                              |
|                     | Target physics                    | John Barnard<br>(LLNL/LBNL) | 17:00 | 17:30 | 0:30  | Shigeo Kawata<br>(Utsunomiya Univ.)         | Wobbling HIB Illumination Uniformity                                                              |
|                     |                                   |                             | 17:30 | 18:00 | 0:30  | Toru Sasaki<br>(Nagaoka Univ. of Technol.)  | Warm Dense Matter Experiments and Diagnostics by using Pulsed-Power Devices and Intense Ion Beams |
|                     |                                   |                             |       |       |       |                                             |                                                                                                   |
|                     |                                   |                             | 19:00 | 21:00 | 2:00  |                                             | Dinner at "Amataro" (Senri-Chuo)                                                                  |

|                     |                                        |                                     |       |       |      |                                 |                                                                                           |
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| 14 October<br>(FRI) | Ion-driven<br>WDM experiments 1        | Jun Hasegawa<br>(Tokyo Tech)        | 9:15  | 9:45  | 0:30 | Yoshiyuki Oguri<br>(Tokyo Tech) | Heavy-Ion Stopping Calculation for Warm Dense Targets Using Dielectric Response Functions |
|                     |                                        |                                     | 9:45  | 10:15 | 0:30 | Peter Seidl<br>(LBNL)           | Beam Experiments at LBNL                                                                  |
|                     |                                        |                                     | 10:15 | 10:30 | 0:15 | Coffee Break                    |                                                                                           |
|                     | Ion-driven<br>WDM experiments 2        | Shigeo Kawata<br>(Utsunomiya Univ.) | 10:30 | 11:00 | 0:30 | Jun Hasegawa<br>(Tokyo Tech)    | Novel Focusing Device for Ion-Driven WDM Experiments                                      |
|                     |                                        |                                     | 11:00 | 11:30 | 0:30 | Pavel Ni<br>(LBNL)              | Warm Dense Matter Target Experiments on NDCX-I and Plans for NDCX-II (Invited)            |
|                     | Special lecture:<br>Fukushima disaster |                                     | 11:30 | 12:00 | 0:30 | Masao Ogawa<br>(Komazawa Univ.) | Impact of the Fukushima Disaster on Japanese Fusion Research                              |
|                     | Closing                                | Kazuhiro Horioka<br>(Tokyo Tech)    | 12:00 | 12:25 | 0:25 | Discussion and Conclusions      |                                                                                           |
|                     |                                        |                                     | 12:25 | 12:30 | 0:05 | Yoshiyuki Oguri<br>(Tokyo Tech) | Closing Remarks                                                                           |