

| CRYOGENICS SYSTEMS        |          |   |   |              |  |
|---------------------------|----------|---|---|--------------|--|
| <b>Tuesday 01/12/20</b>   |          |   |   |              |  |
| Chicago Time              | Duration | Title   | Presenter   | Institute    |  |
| 9:10 AM                   | 0:20     | Design status & development of PIP-II Cryogenic Distribution System   | Andrew Dalesandro                                     | FNAL         |  |
| 9:30 AM                   | 0:15     | Discussion  |   |              |  |
| 9:45 AM                   | 0:15     | Cryoplant integration process design  | Joaquim Creus-Prats                                   | FNAL         |  |
| 10:00 AM                  | 0:15     | Cryoplant integration technical design  | Jitendra Kumar  | BARC         |  |
| 10:15 AM                  | 0:30     | Discussion  |   |              |  |
| 10:45 AM                  | 0:15     | CDS design capacity and requirements  | Ashish Shukla   | RRCAT        |  |
| 11:00 AM                  | 0:15     | Cryogenic Distribution System operating modes   | Ram Dhuley  | FNAL         |  |
| 11:15 AM                  | 0:30     | Discussion  |   |              |  |
| 11:45 AM                  | 0:15     | Summary talk for day 1  | Pawel Duda<br>Andrew Dalesandro                       | WUST<br>FNAL |  |
| 12:00 PM                  | 0:00     | Session End   |   |              |  |
|                           |          |   |   |              |  |
| <b>Wednesday 02/12/20</b> |          |   |   |              |  |
| Chicago Time              | Duration | Title   | Presenter   | Institute    |  |
|                           |          |   |   |              |  |
| 7:30 AM                   | 0:15     | CDS Pressure safety relief sizing methodology: trapped volumes, operational scenarios, failure scenarios, and vacuum reliefs                                | Tomasz Banaszkiewicz                                  | WUST         |  |
| 7:45 AM                   | 0:15     | CDS Pressure safety relief sizing Direct Integration Method; CM 2 K relief sizing methodology   | Ashish Shukla   | RRCAT        |  |
| 8:00 AM                   | 0:30     | Discussion  |   |              |  |
| 8:30 AM                   | 0:20     | ESS design solutions for CDS transfer lines and cryogenic vessel supports   | Pawel Duda<br>Jaroslaw Polinski                       | WUST         |  |
| 8:50 AM                   | 0:10     | LCLS-II design solutions for CDS transfer lines and cryogenic vessel supports   | Bill Soyars   | FNAL         |  |
| 9:00 AM                   | 0:30     | Discussion  |   |              |  |
| 9:30 AM                   | 0:15     | Break   |   |              |  |
| 9:45 AM                   | 0:30     | Thermalization of thermal shields, proposed and proven solutions of thermal connections between steel and aluminium/copper - experiences and best practices | Pawel Duda<br>Jaroslaw Polinski<br>Grzegorz Michalski | WUST         |  |
| 10:15 AM                  | 0:30     | Discussion  |   |              |  |
| 10:45 AM                  | 1:00     | Summary talk for day 2  | Pawel Duda<br>Andrew Dalesandro                       | WUST<br>FNAL |  |
| 11:45 AM                  | 0:00     | Session End   |   |              |  |
|                           |          |   |   |              |  |
| <b>Thursday 03/12/20</b>  |          |   |   |              |  |
| Chicago Time              | Duration | Title   | Presenter   | Institute    |  |
|                           |          |   |   |              |  |
| 7:30 AM                   | 0:15     | Stress and flexibility of bayonets, control valves, and supports  | Pawel Duda  | WUST         |  |
| 7:45 AM                   | 0:15     | Stress and flexibility criteria for bayonets  | Ram Dhuley  | FNAL         |  |
| 8:00 AM                   | 0:30     | Discussion  |   |              |  |
| 8:30 AM                   | 0:30     | Thermo-mechanical FEA models development, specification, and methodology  | Pawel Duda  | WUST         |  |
| 9:00 AM                   | 0:30     | Discussion  |   |              |  |
| 9:30 AM                   | 1:00     | Summary talk for day 3/Closeout/Report  | Pawel Duda<br>Andrew Dalesandro                       | WUST<br>FNAL |  |
| 10:30 AM                  | 0:00     | Session End   |   |              |  |