

## Daily Schedule

Prepared by

N.Tamura

| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        | Experimental Subject                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|-------|-----------|----------------------------------------------------------------------|----|--------|----|----|----|----|-----|--------|----------|--------|--------|-------|-------|-----------|---|--|-----|------|------|--------|-------|--|-----------------------|--|-----|-----|-------|--------|-------|--|----|--|
| 2024/3/20(Wed)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        | ECH commissioning, Interactions of energetic ions with Alfven eigenmodes<br>Effect of impurity seeding for divertor detachment on anomaly detection of radiative collapse                                                                                                                                                                                                                                                                                                                                                |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| Exp. No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        | Experimental Session Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |        |        |       |           | Session Coordinator                                                  |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| 1334                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        | IA/MAP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |        |        |       |           | Y.Hayashi[2121] / K.Mukai[2240]<br>T.Kawate[2256] / Y.Takemura[2167] |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| Time Table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        | 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9      | 10     | 11     | 12    | 13        | 14                                                                   | 15 | 16     | 17 | 18 | 19 | 20 | 21  | 22     |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | U<br>P | [IA]   |        |       |           | [MAP]                                                                |    | D<br>N |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| Details and Experimental Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |        |        |       |           |                                                                      |    |        |    |    |    |    | Gas |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| [IA](10:30 ~ 14:15) ECH, NBI, ICH<br>10:30-12:15 ECH commissioning (M. Nishiura)<br>12:15-13:15 Study of interactions of energetic ions with stable or weakly unstable Alfven eigenmodes in high density LHD plasmas produced by ice pellet injection (K. Toi, K. Ogawa)<br>13:15-13:45 [Change of Mag. Config., 2.75T -> 1.375T]<br>13:45-14:15 Study of interactions of energetic ions with stable or weakly unstable Alfven eigenmodes in high density LHD plasmas produced by ice pellet injection (K. Toi, K. Ogawa)<br>14:15-14:55 [Change of Mag. Config., 3.6m,1.375T -> 3.65m,2.71T]<br><br>Sequence:3min<br><table><tr><th>#</th><th>Option</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr><tr><td>1</td><td></td><td>CCW</td><td>3.6</td><td>2.75</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td></td><td>CCW</td><td>3.6</td><td>1.375</td><td>1.2538</td><td>100.0</td><td></td></tr></table> |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |        |        |       |           |                                                                      |    |        |    |    |    |    | #   | Option | Polarity | Rax(m) | Bax(T) | gamma | Bq(%) | Subcooled | 1 |  | CCW | 3.6  | 2.75 | 1.2538 | 100.0 |  | 2                     |  | CCW | 3.6 | 1.375 | 1.2538 | 100.0 |  | H2 |  |
| #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Option | Polarity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rax(m) | Bax(T) | gamma  | Bq(%) | Subcooled |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        | CCW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.6    | 2.75   | 1.2538 | 100.0 |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        | CCW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.6    | 1.375  | 1.2538 | 100.0 |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| [MAP](14:45 ~ 16:45) ECH, NBI<br>14:55-16:45 Effect of impurity seeding for divertor detachment on anomaly detection of radiative collapse (K. Mukai)<br><br>Sequence:3min<br><table><tr><th>#</th><th>Option</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr><tr><td>1</td><td></td><td>CCW</td><td>3.65</td><td>2.71</td><td>1.2538</td><td>100.0</td><td></td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |        |        |       |           |                                                                      |    |        |    |    |    |    | #   | Option | Polarity | Rax(m) | Bax(T) | gamma | Bq(%) | Subcooled | 1 |  | CCW | 3.65 | 2.71 | 1.2538 | 100.0 |  | H2,N2,Ne<br>,Ar,Kr,Xe |  |     |     |       |        |       |  |    |  |
| #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Option | Polarity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rax(m) | Bax(T) | gamma  | Bq(%) | Subcooled |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        | CCW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.65   | 2.71   | 1.2538 | 100.0 |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| Wall Conditioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | GD(Before Exp.): None , GD(After Exp.): None , Cryopump(During Exp.): off                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
| Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | (IA)ice pellet injection<br><br>(MAP)LID(14:55-16:45)<br><br>[Precautions for today's LHD experiments]<br>(id:724) Impurity gas puff<br>(id:729) ECH: Low absorption condition<br>(id:731) Mag. Conf.: Using LID coil<br>(id:737) ECH: Commissioning (alignment, profile check)<br>(id:746) ECH: EC wave Injection from the Port 1.5Uo antenna<br>(id:748) ECH: off-axis injection (Combined)<br>(id:749) ICH: Antennae insertion for plasma heating by ICH : Subcool required<br>(id:757) ECH: Optical Vortex injection |        |        |        |       |           |                                                                      |    |        |    |    |    |    |     |        |          |        |        |       |       |           |   |  |     |      |      |        |       |  |                       |  |     |     |       |        |       |  |    |  |