|                    | 9:00 - 9:15<br>9:15 - 9:30<br>9:30 - 9:45  | Xiaohui Fan<br>Feige Wang               | Welcome, logistics and briefing on the goal of this workshop                    |  |  |  |
|--------------------|--|---|---|--|--|--|
| ·                  |  | Feige Wang                              |   |  |  |  |
|                    | 9:30 - 9:45  | i cige waily                            | Overview of ASPIRE program and data products                                    |  |  |  |
|                    |  | Jinyi Yang                              | Updates from quasar frontier program and ASPIRE quasar sample                   |  |  |  |
|                    | 9:45 - 10:00   | Frederick Davies                        | First Results from GO#2073: Towards Reionization Epoch Quasar Light Echoes      |  |  |  |
|                    | 10:00 - 10:15  | Roberto Decarli                         | A quasar-satellite galaxy merger at z=6.2                                       |  |  |  |
|                    | 10:15 - 10:30  | Cycle 2 Pls                             | Approved Cycle 2 program updates  |  |  |  |
|                    | Coeffe (10:30-11:00)   |   |   |  |  |  |
|                    | Program updates Black holes and their host galaxies (11:00-12:30, Chair: Benny Trakhtenbrot)   |   |   |  |  |  |
|                    | 11:00 - 11:15  | Meredith Stone                          | Constraining the Stellar Masses of High-L_AGN z~5-7 Quasars                     |  |  |  |
|                    | 11:15 - 11:30  | Minghao Yue                             | EIGER: Detecting the host galaxies of luminous quasars at z>~6                  |  |  |  |
|                    | 11:30 - 11:45  | Sarah Bosman                            | High-z Quasars with MIRI/MRS  |  |  |  |
|                    | 11:45 - 12:00  | Weizhe Liu                              | Quasar host galaxy and outflow in the EoR                                       |  |  |  |
|                    | 12:00 - 12:15  | Camryn Phillips                         | Extended Emission in z~6 JWST/NIRSpec quasars                                   |  |  |  |
|                    | 12:15 - 12:30  | Mingyu Li                               | HeI 1083nm emitting galaxies at cosmic noon                                     |  |  |  |
|                    | Lunch (12:30-14:00)  |   |   |  |  |  |
|                    | 13:30  | John Adams                              | intro to Biosphere 2  |  |  |  |
|                    |  |   | · ·   |  |  |  |
|                    | Project updates high redshift galaxies, IGM and CGM (14:00-15:30, Chair: Sarah Bosman)   |   |   |  |  |  |
|                    | 14:00 - 14:15  | Jackie Champagne                        | Updates on Characterizing the [OIII] Emitters in ASPIRE Protocluster Candidates |  |  |  |
|                    | 14:15 - 14:30  | Zheng Cai                               | Metallicity Properties of Galaxies with JWST                                    |  |  |  |
|                    | 14:30 - 14:45  | Joseph Hennawi                          | IGM damping with JWST   |  |  |  |
|                    | 14:45 - 15:00  | Koki Kakiichi                           | Galaxy-IGM cross-correlation from ASPIRE quasar fields                          |  |  |  |
|                    | 15:00 - 15:15  | Yunjing Wu                              | Characterizing the Early Cosmic Ecosystems through ALMA and JWST                |  |  |  |
|                    | 15:15 - 15:30  | Siwei Zou                               | Metal enrichment in the CGM at the end of reionization epoch                    |  |  |  |
|                    | Coeffe (15:30-16:00)   |   |   |  |  |  |
|                    | Breakout: project/paper discussions (16:00-18:00)  |   |   |  |  |  |
|                    | Topics: (1) quick updates on status of existing projects, at least for the projects not discussed during the early science sessions; (2) identify any technical issues and challenges, about data and modeling for these projects, which hopefully will allow the group to come up with a few key issues that people can collaboratively work on; (3) ideas of new projects/papers from existing data. |   |   |  |  |  |
|                    |  | Coordinators:Xiaohui Fan and Feige Wang | Galaxy and large-scale sctructure   |  |  |  |
|                    |  | Coordinator:Joseph Hennawi              | IGM/CGM group   |  |  |  |
|                    |  | Coordinator:Jinyi Yang                  | BH/host group   |  |  |  |
|                    |  | EREBUS Project Announcements            |   |  |  |  |
|                    | Dinner and discussion (18:30)  |   |   |  |  |  |
| Day2 morning       | Lessons learned from other JWST programs (9:00-10:40)  |   |   |  |  |  |
| Wednesday, Oct 4th |  | Steve Finkelstein (invited)             | Evolution of the UVLF at z > 9  |  |  |  |

|                     | 9:20 - 9:40  | Jenny Greene (invited, remote talk)                               | Little red dots  |  |  |
|---------------------|--|---|--|--|--|
|                     | 9:40 - 9:55  | Jianwei Lyu   | AGN selection and demographics: a new age with JWST/MIRI   |  |  |
|                     | 9:55 - 10:10   | Ryan Endsley  | The rest-optical line properties of z~6-9 Lyman-break galaxies   |  |  |
|                     | 10:10 - 10:25  | Fengwu Sun  | Combining deep NIRCam imaging + grism spectroscopy: results from JADES+FRESCO and PEARLS+MAGNIF  |  |  |
|                     | 10:25 - 10:40  | Gene Leung  | Probing obscured AGN at z>6 with MIR imaging   |  |  |
|                     |  |   |  |  |  |
|                     | Coeffe (10:40-11:00)                                 |   |  |  |  |
|                     | Follows abovetions simulations and supposite (       | 14.00 42.20\  |  |  |  |
|                     | Followup observations, simulations and synergies (   | 11:00-12:30)  | Unvailing the ecoembly history of the high a guessy from their first seeds using ecomplexical  |  |  |
|                     | 11:00 - 11:15  | Aklant Kumar Bhowmick   | Unveiling the assembly history of the high-z quasars from their first seeds using cosmological hydrodynamic simulations  |  |  |
|                     | 11:15 - 11:30  | Emanuele Paolo Farina   | JWST+MUSE: potential synergies   |  |  |
|                     | 11:30 - 11:45  | Raymond Remigio   | Probing the Lya halos of the most distant quasars with Keck/KCWI   |  |  |
|                     | 11:45 - 12:15  | All (free discussion)   | Existing follow-up observations Data reduction tasks Future non-JWST follow-up plans How to follow-up little red dots New simulations  |  |  |
|                     | 12:15 - 12:30  | Xiaohui Fan   | unofficial thoughts on JWST TAC process  |  |  |
|                     |  |   | ·  |  |  |
|                     | Lunch (12:30-14:00)                                  |   |  |  |  |
|                     | ,  |   |  |  |  |
| Day2 afternoon      | Data reduction demo and data chanllenge discussio    | n (14:00-15:30)   |  |  |  |
| Wednesday, Oct 4th  | 14:00 - 14:30  | Weizhe Liu, Jianwei Lyu, Federica<br>Loiacono and Roberto Decarli | NIRSpec/IFU and Q3D  |  |  |
| Troundoudy, Got Han | 14:30 - 15:00  | Joseph Hennawi  | NIRSpec FSS/MOS and Pypelt   |  |  |
|                     | 15:00 - 15:30  | Fengwu Sun  | NIRCam WFSS  |  |  |
|                     | 15:30 - 15:50  | Jackie Champagne, Feige Wang and<br>Jinyi Yang                    | Discussion about future data development needs and other data challenge  |  |  |
|                     | Late afternoon hikes and dinner in town (16:00 - )   |   |  |  |  |
|                     |  |   |  |  |  |
| Day3 morning        | Review of Cycle 2 programs and Cycle 3 ideas (9:00-  | 10:30)  |  |  |  |
| Thursday, Oct 5th   | 9:00 - 9:30  | Fan organize  | Review of Cycle 2 programs   |  |  |
|                     | 9:30 - 10:30   | Yang organize   | We will send a Google Form to collect Cycle 3 proposal ideas and plans before the workshop. We will review the submissions during this session. Anyone can briefly discuss or present their ideas and plans, using one or two slides.  |  |  |
|                     | Cooffe (40:20 44:00)                                 |   |  |  |  |
|                     | Coeffe (10:30-11:00)                                 |   |  |  |  |
|                     | Ideas of Cycle 3 medium-large programs (11:00-12:30) |   |  |  |  |
|                     | 11:00 - 12:20  | Wang organize   | We will send a Google Form to collect Cycle 3 proposal ideas and plans before the workshop. We will review the submissions during this session. Anyone can briefly discuss or present their ideas and plans, using a couple of slides (depends how many programs we could have). |  |  |
|                     | 12:20 - 12:30  | Wang organize   | To decide the breakout discussion groups for the afternoon session   |  |  |
|                     | 12.20 - 12.30  |   | To decide the breakout discussion groups for the atternoon session   |  |  |
|                     | Lunch (12:30-14:00)                                  |   |  |  |  |
|                     |  |   |  |  |  |
| Day 3 afternoon     |  |   |  |  |  |

| Thursday, Oct 5th |   | Breakout based on discussions in the morning  |
|-------------------|---|---|
|                   |   |   |
|                   | Coeffe (15:30-16:00)                      |   |
|                   |   |   |
|                   | Breakout: cycle 3 plan (16:00-18:00)      |   |
|                   |   | Continue discussion Prepare for reports that will be presented to everybody on Friday morning |
|                   | Dinner, discussion and stargazing (18:30) |   |
|                   |   |   |
| Day4 morning      | Breakout session reports (9:00-10:30)     |   |
| Friday, Oct 6th   |   | Reports based on Thursday's discussions   |
|                   |   |   |
|                   | Coeffe (10:30-11:00)                      |   |
|                   |   |   |
|                   | Summary and to-dos (11:00-12:30)          |   |
|                   |   |   |
|                   | Lumph (40:00 44:00)                       |   |
|                   | Lunch (12:30-14:00)                       |   |
|                   | Departure to Tucson (14:00)               |   |