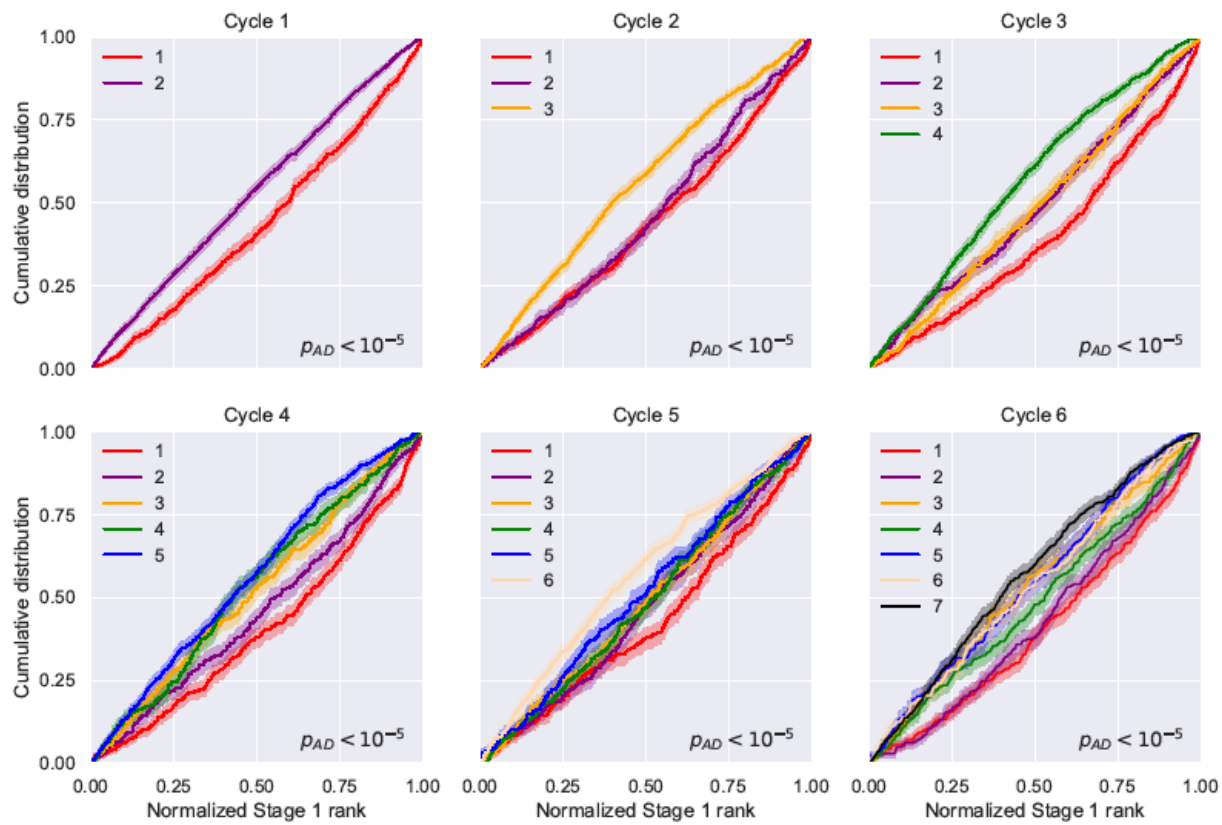


ALMA Cycle 8 Dual-Anonymous Review Policy

Sheng-Yuan Liu

Dual-Anonymous Policy

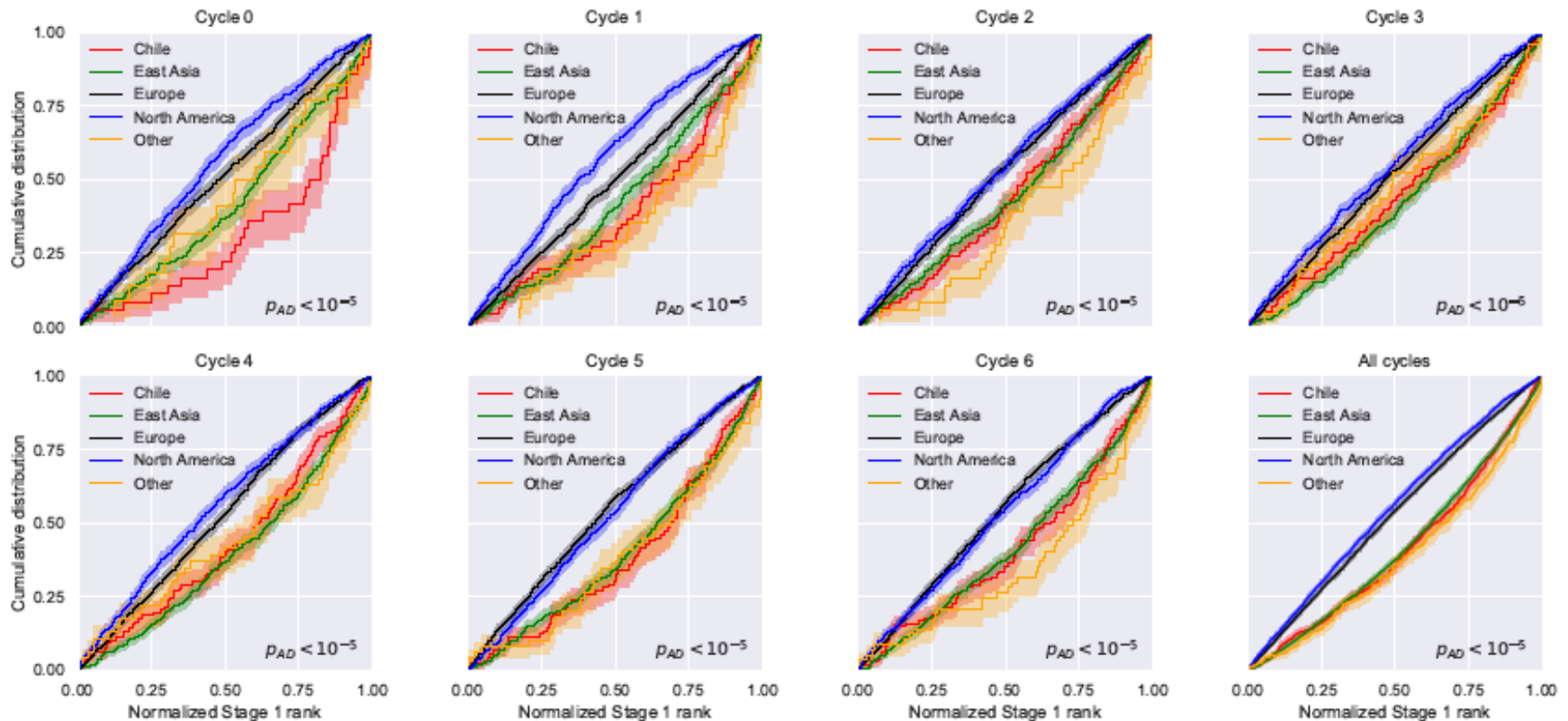
- Goal : To reduce any possible bias as much as possible
- Background:
 - Detections of gender bias in HST proposal review removed only after double-anonymous review (Reid 2014; Strolger & Natarajan 2019)
 - For ALMA, see “Systematics in the ALMA Proposal Review Rankings” by John Carpenter
 - Cycle 0 - 6 stage 1 & 2 rankings are analyzed against experience, region, and gender



PIs who submit an ALMA proposal in multiple cycles have systematically better proposal ranks than PIs who have submitted proposals for the first time.

Dual-Anonymous Policy

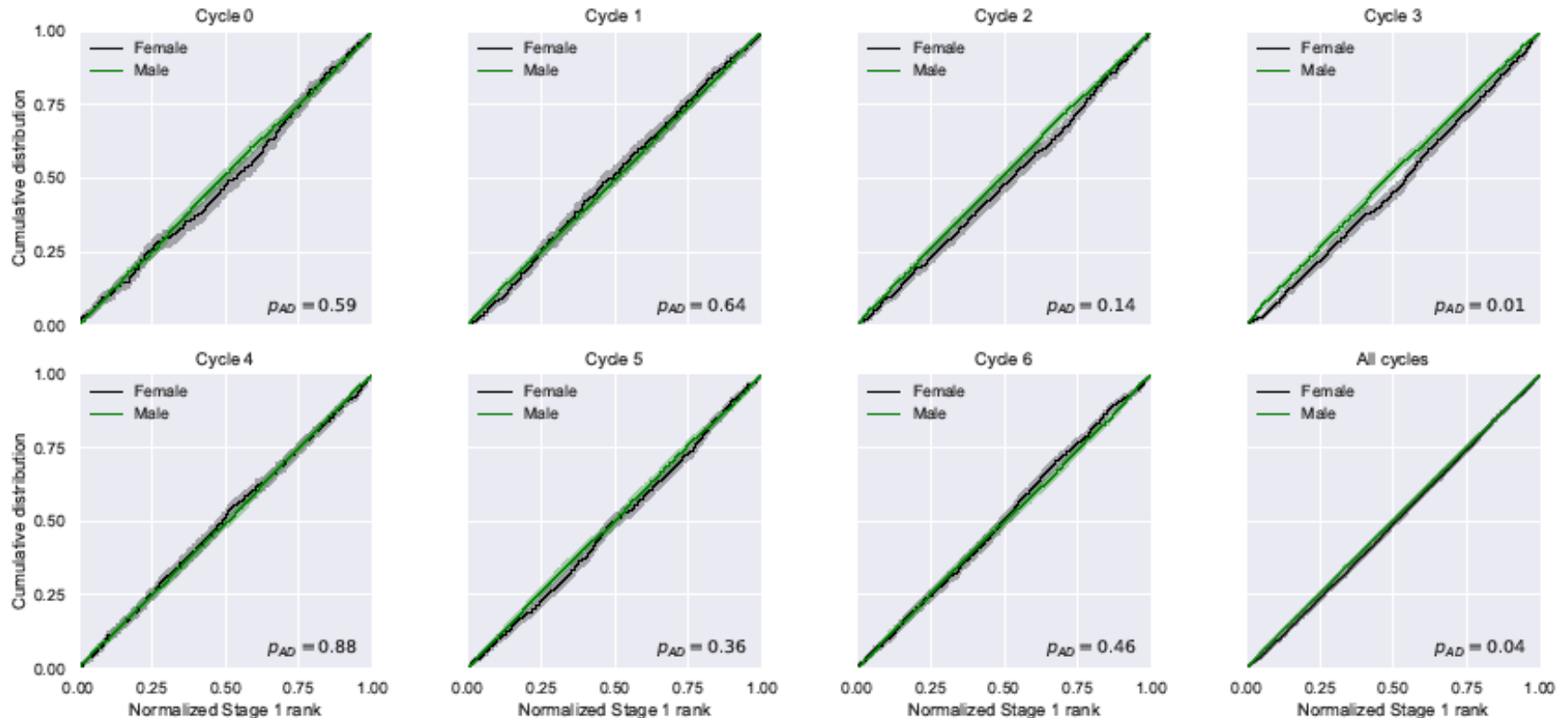
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PIs from Europe and North America have better Stage 1 rankings than PIs from Chile and East Asia.

Dual-Anonymous Policy

- Goal : To reduce any possible bias as much as possible
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Proposals led by men have better Stage 1 rankings than women when averaged over all cycles.

Dual-Anonymous Policy

- PIs are required to anonymize their proposals. PIs who do not anonymize their proposals in accordance with the guidelines may have their proposal **rejected**.
- general guidelines:
 - **Do not identify** the PI or any of the co-PIs or co-Is in the proposals
 - Proposers should use **third person or neutral wording** when referring own work
 - Do not refer to data from ALMA or other observatories in an identifying fashion
 - non-public available software or data should be referenced as “obtained in private communication”
 - Do not include references and links to papers in preparation or submitted
 - Do not include acknowledgements or source of any grant funding
 - For re-submission, previous proposal code and investigators should not be indicated
- Same guideline should be followed for the scientific justification part of a large program

Dual-Anonymous Policy

- Examples:
 - “In Smith et al. (2018), we demonstrated...”
 - “Smith et al. (2018) demonstrated...”

- “Figure 1 shows the image from our Cycle 7 ALMA program (2019.1.02045.S, PI Smith).”
- “Figure 1 shows the image from the Cycle 7 ALMA program 2019.1.02045.S.”

- “This is a resubmission of our ongoing Cycle 7 program 2019.1.02045.S (PI: Smith). Half of our targets have been observed and we are resubmitting the proposal to obtain the remaining half.”
- “This is a resubmission of our ongoing Cycle 7 program. Half of our targets have been observed and we are resubmitting the proposal to observe the remaining half.”

Dual-Anonymous Policy

We propose to perform a multi-band, beam-matched spectral scan of the central molecular zone of the nearby starburst galaxy NGC 253 in order to obtain the first template of extragalactic molecular complexity and calibrate extragalactic molecular diagnostics. To sample a wide range of molecular excitation states, we will scan the full ALMA bands 3, 4, 6, and 7. **From our** previous ALMA observations (Mangum+2015), we estimate that in band 6 and 7 we will obtain confusion limited spectra in most of the central region. **Our pioneering studies of** multi-band spectral scans (e.g., Costagliola+2015) show that the combined effect of more optically thin tracers and proper treatment of molecular excitation can lead to a tenfold increase in the sensitivity of molecular diagnostics to the physical properties of the ISM.

Here is the same text revised according to the guidelines:

We propose to perform a multi-band, beam-matched spectral scan of the central molecular zone of the nearby starburst galaxy NGC 253 in order to obtain the first template of extragalactic molecular complexity and calibrate extragalactic molecular diagnostics. To sample a wide range of molecular excitation states, we will scan the full ALMA bands 3, 4, 6, and 7. **Based on** previous ALMA observations (Mangum+2015), we estimate that in band 6 and 7 we will obtain confusion limited spectra in most of the central region. **Previous studies with** multi-band spectral scans (e.g., Costagliola+2015) show that the combined effect of more optically thin tracers and proper treatment of molecular excitation can lead to a tenfold increase in the sensitivity of molecular diagnostics to the physical properties of the ISM.