Agenda for Artificial Intelligence for the Methane Cycle (AI4CH4) Workshop Series

March 3

12:00-12:20: Workshop introduction and charge

12:20- 1:50: Brief presentations highlighting gaps and opportunities

1:50-2:15: Group Q&A

2:15-2:45: <break>

2:45-4:40: Breakouts for participant introductions and ideation

4:40-5:00: Report back to full group

March 10

12:00-2:15: Improving predictions from fundamental microbiology

2:15-2:45: <break>

2:45-5:00: Environmental controls and empirical relationships

March 17

12:00-2:15: Targeting field measurements and observations

2:15-2:45: <break>

2:45-5:00: Data-model integration

March 24

12:00-2:15: Multiscale Modeling

2:15-2:45: <break>

2:45-5:00: Breakout by session topic for workshop synthesis and report drafting

Topics for Each Discussion Session

- 1. Knowledge gaps and scientific questions
- 2. Characteristics and challenges of specific data and models
- 3. Related algorithms, infrastructure, and their potential to address gaps
- 4. New observations/measurements/experimental design needed
- 5. Data products (QC, UQ, harmonization, benchmarks) needed