

Agenda for MicroSim workshop (14th July—18th July)

Day 1: 14th July (Start from IISc Bangalore by about 7:00am)

Planning to reach by 2:00pm at Challakere

Online+Offline

Session 1: (18:30–20:00) Introduction to the phase-field method (Allen-Cahn, Cahn-Hilliard models)

Session 2: (21:30–23:00) Phase-field models—Wheeler, Boettinger, McFadden Model

Session 3: (23:00–00:30) Phase-field models—Kim-Kim Suzuki Model

Day 2 : 15th July

Offline participants

Coding Session 1 (14:00–16:00): Debugging test-cases for new release

Coding Session 2 (16:00–18:00): Debugging test-cases for new release

Online+Offline

Session 4: (18:30–20:00) Phase-field models—Grand-Potential Model

Session 5: (21:30–23:00) Phase-field model—Asymptotic corrections, adsorption corrections

Session 5: (23:00–00:30) Thermodynamic coupling in phase-field models

Day 3: 16th July

Offline participants

Coding session 3 (14:00–16:00): Debugging test-cases for new release

Coding session 4 (16:00–18:00): Debugging test-cases for new release

Online+Offline

Session 6: (18:30–20:00) Recipe for calculating properties from lower length scale models

Session 7: (21:30–23:00) Introducing coherency stresses in phase-field models

Session 8: (23:00–00:30) First hands-on session GP-MPI module

Day 4: 17th July

Offline participants

Coding session 5 (14:00–16:00): Debugging test-cases for new release

Info session (16:00–18:00): Generic architecture of AMReX

Online + Offline

Session 9: (18:30–20:00) Second hand-on session GP-MPI module

Session 10: (21:30–23:00) Hands-on session KKS-CUDA module

Session 11: (23:00–00:30) Hands-on session GP-AMReX module

Day 5: 18th July

Coding session 7 (16:00–18:00): Finalizing new release

Session 12: (18:00–20:00) MicroSim talk: New release features

Session 13: (21:30–23:00) New Release, discussion and feedback

19th July-- Return (start 10:00am)