



Future Benchmarks: BP3-BP6

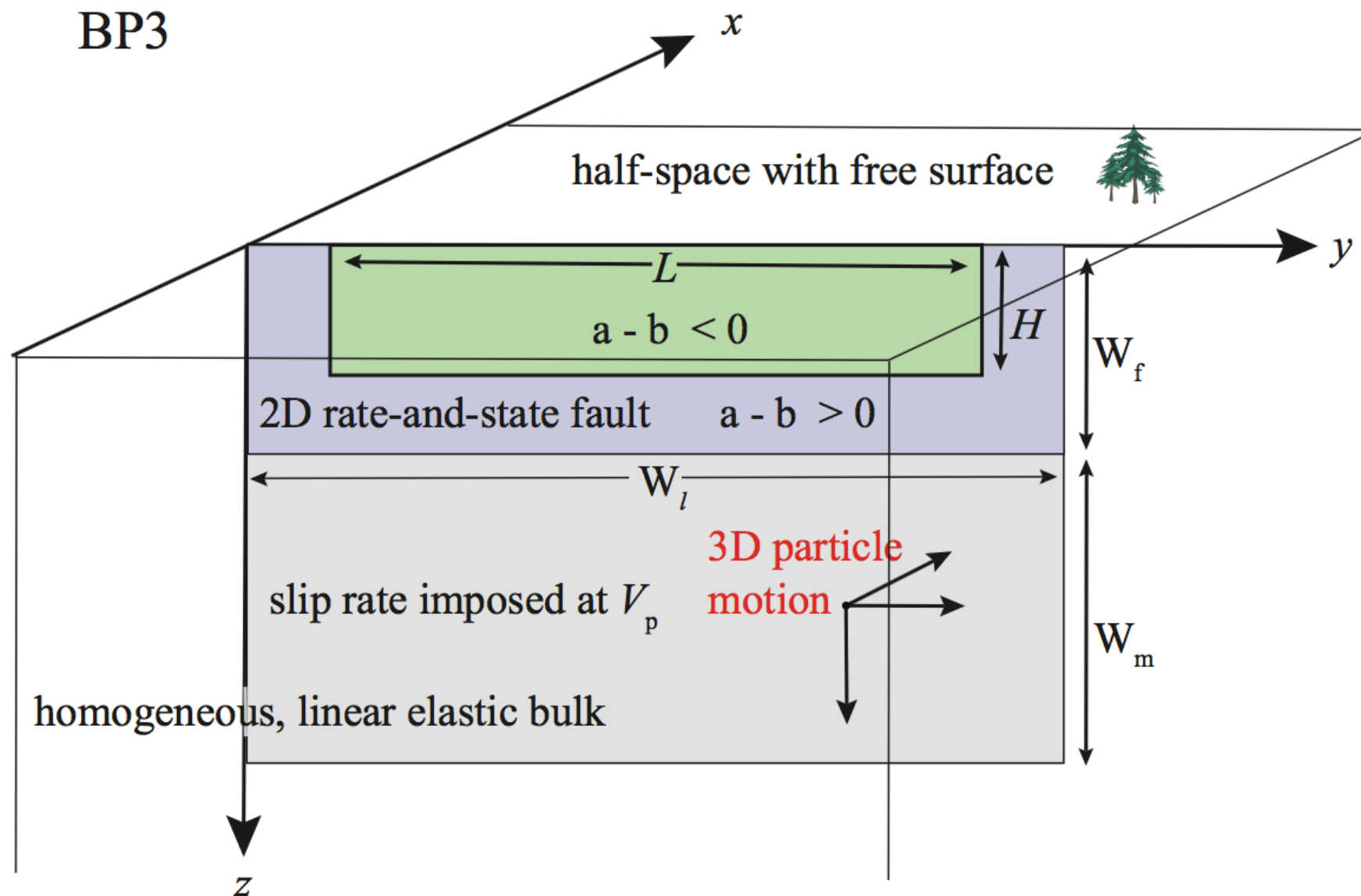
SCEC SEAS Workshop, Nov. 29, 2018



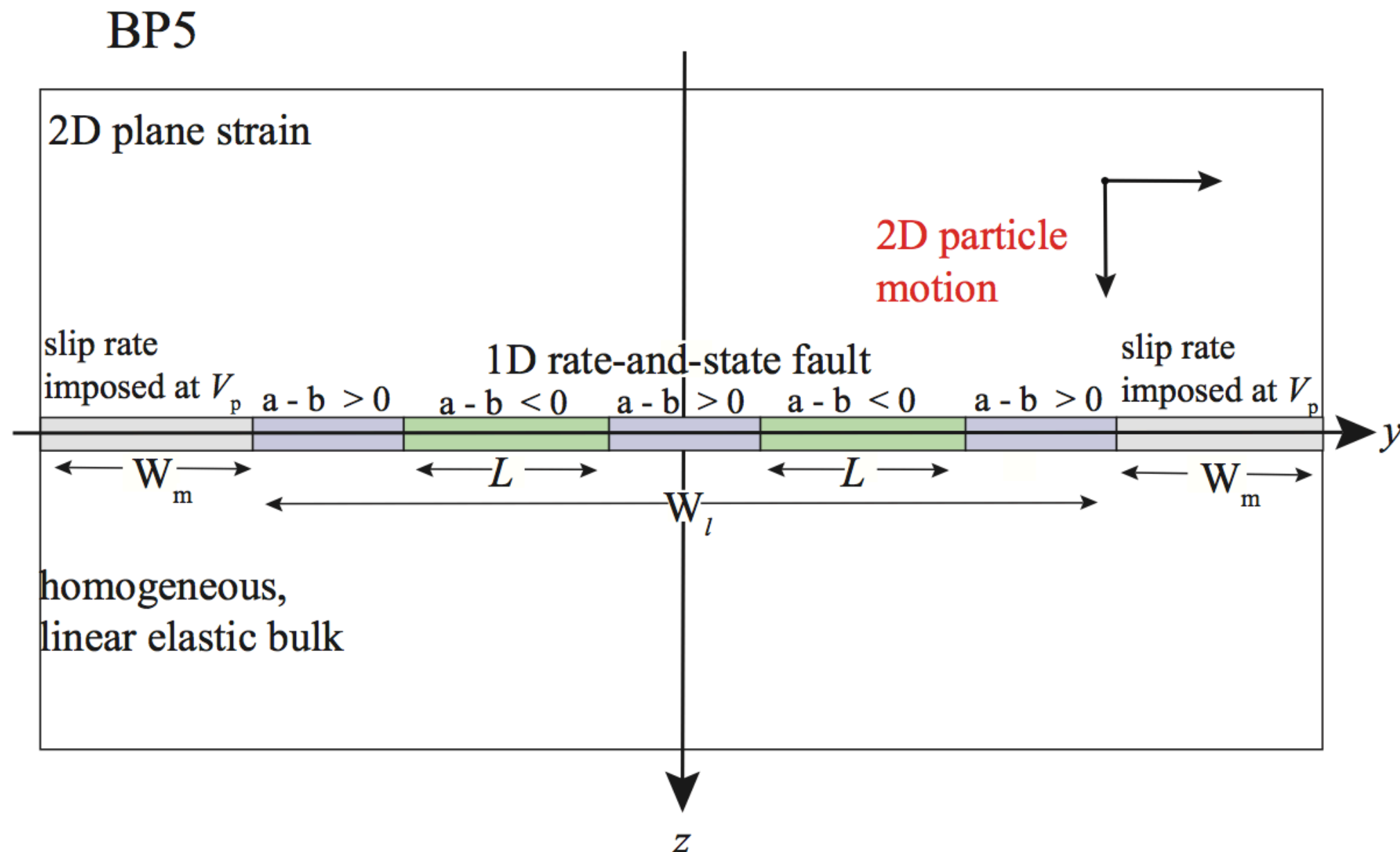
Benchmarks for code verification

- Guidelines
 - Start simple & incrementally increase model complexity
 - Take advantage of experience and tools from the dynamic rupture group
 - Design benchmarks that maximize participations
 - Develop the web platform based on comparison needs
- Tasks
 - What model features should we compare?
 - How do we assess agreements and discrepancies?
 - What constitute successful code verifications for SEAS models?

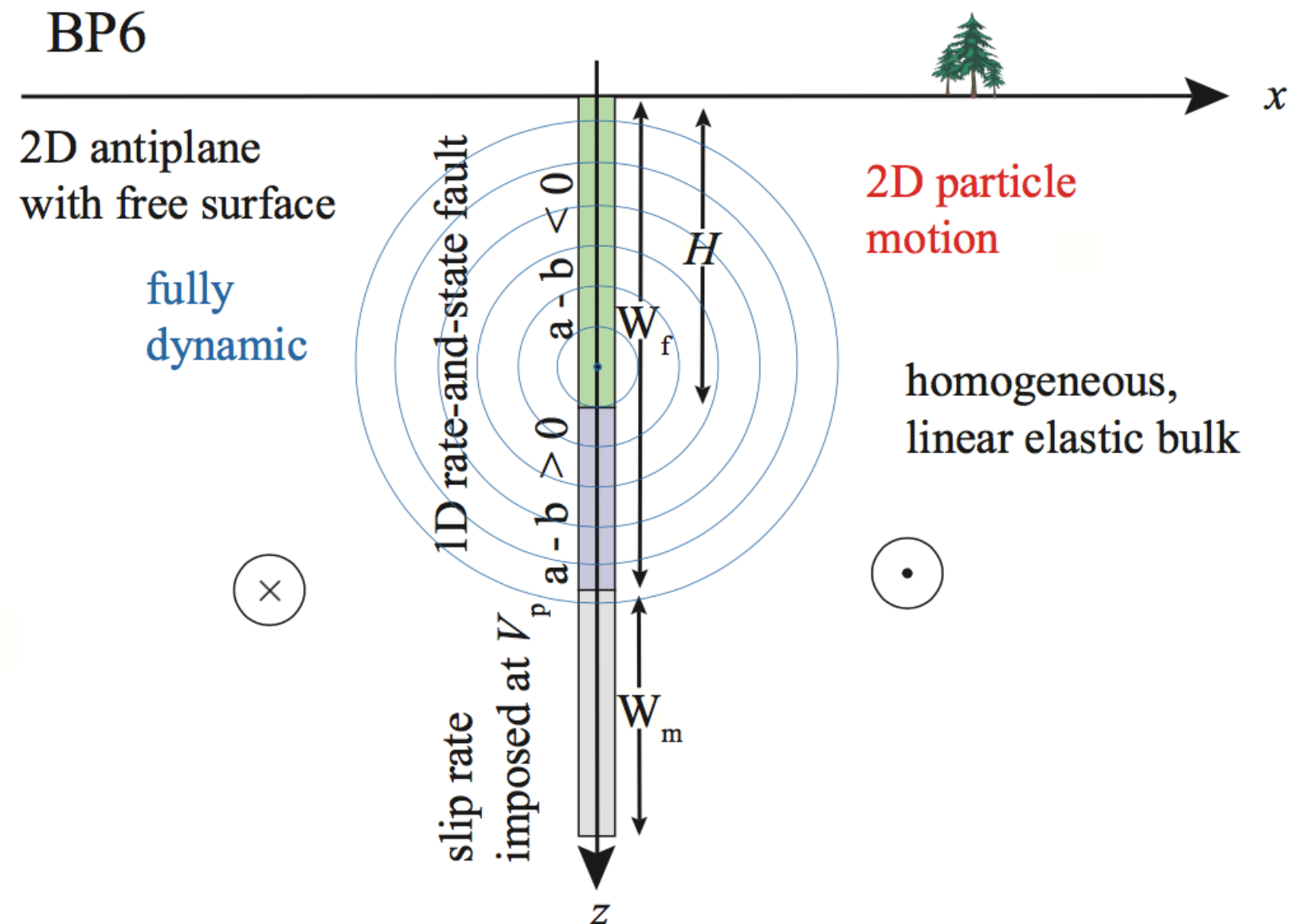
BP3: A 3D problem in a half space, similar to BP1



BP5: A 2D plane strain problem with two VW regions separated and surrounded by VS regions



BP6: A 2D antiplane problem with inertia effects, same setup as BP1





Feasibility of BP3-BP6?

Platform Development Plan

- Adding tuning functions:
 - unit conversion (e.g. seconds to years)
 - time window selection
 - time translation (to remove spinup period)
- plotting function for slip contours at nonuniform time increments