Thoughts for subduction simulation session:

- Rupture generators
  - Frankel+Wirth ‘background’+asperity/sub-event/SGM model – are there ‘rules’ for this approach that can be consistently applied for generic rupture scenarios?
  - GP (crustal) [based on Mai and Beroza spatial random field]
  - GP Hybrid approach (GP + Irikura recipe)
  - Stochastic means for placement of asperities?
  - Other rup gen’s proposed?
  - Representing long-wavelength non-planar geometry explicitly (vs. small-scale roughness)
- Scaling of SRF gen parameters:
  - Mw-A: Skarlatoudis et al. model - other models used?
  - Example of scaling of timing perturbations with M in Wirth and Frankel
  - Other parameters that might need to change?
  - What about as a function of depth? (e.g., for crustal have shallow and deep zones with different rise time scaling adjustments)
  - GP uses 50bar for crustal, what are suitable ‘baselines’ for slab and interface (noting its hard to generalise)
- 3D velocity modelling
  - Deeper events sensitive to deeper Vs structure (than crustal events), validation considerations for deep crustal models needed
  - Anisotropic attenuation (both geometric + anelastic) seen in instrumental and isoseismal data, but standard HF approach in broadband simulations uses 1D crustal model with quarter-wavelength theory – i.e., isotropic attenuation. Thoughts on alternatives to represent anisotropy?

Buy-in on:

- are keen to be involved in a ‘review’ paper on

“subduction earthquake kinematic rupture generation for strong-ground motion simulations: A review of approaches and relationship to shallow crustal events”