Heterogeneity length scales

- Understand scales and shape of reservoirs
- Understand processes, Earth evolution
Questions

- Zoo of hybrid models, now add:
  - Peridotite/pyroxenite plum pudding model and $p$, $T$ dependent melt extraction at MORB & OIB sites
- Stirring length scales of schlieren compared to melt zone (?)
- Plum pudding: tectonics & isotopes
More questions

- How many reservoirs are there? Are those distinct?
- Should we hunt for EM1, EM2, DMM, HIMU, PM (aka C, aka FOZO)?
- Reservoirs exist (as processes?)
Do we see the source?

- Iceland closer to PM than Hawaii
- Re/Os system, O isotopes argue against lithospheric contamination
- Do we see lithospheric erosion?
What to do?

- Test plum pudding as a function of locality
- Predict effect of melt conditions
- Model melt conditions and extraction
- Derive melt conditions from local seismology
- Regional tomography