Fragment production within transport theory

Overlap of Fermi distributions is required for strong, well mixed central source

- Cluster production and mixing are sensitive to momentum distribution and possibly the off-mass shell contribution
- Also need appropriate equilibrium limit, i.e. heat capacity.

Isospin effects provide important tests of modern transport descriptions

- Range of isospin observables are possible
  - isospin fractionation effects.
  - isospin effects in emission rates.
  - isospin tracing and isospin diffusion effects.
- Modern calculations predict somewhat too narrow fragment isotopic distributions.
  - origin of discrepancy is under investigation.