



D. Rochman

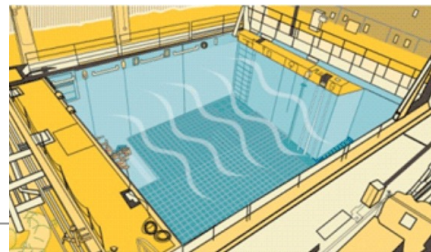
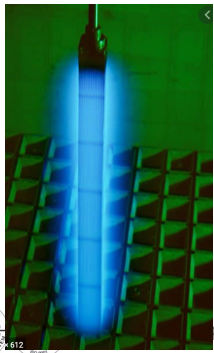
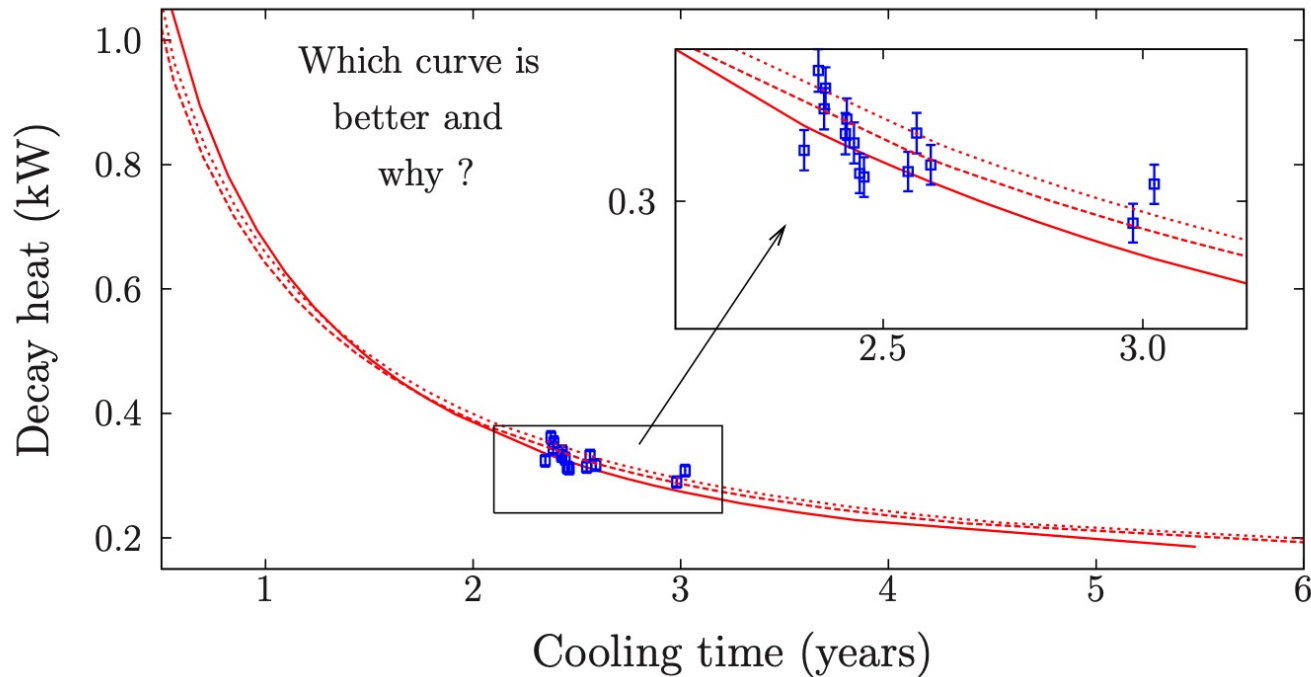
TAR in the back-end fuel: mid- and long-term storage from a neutronics aspect

Target Accuracy Requirement from a neutronics aspect

- Driving forces:
 - Safety (criticality, dose)
 - Cask/canister designs (decay heat)
 - Economy (e.g. space optimization, geological environment)
- For spent fuel, important quantities are
 - SNF characteristics (BU, enrichment, cooling, type, inventory)
 - Decay heat
 - Neutron/gamma emission
 - Nuclide concentrations
- Need for code calculations
 - Validation (bias estimation)
 - Uncertainties

Target Accuracy Requirement from a neutronics aspect

- Strong link with :
 - National efforts
 - EU EURAD WP8, NEA JEFF project, IAEA CRP on Spent Fuel Characterization



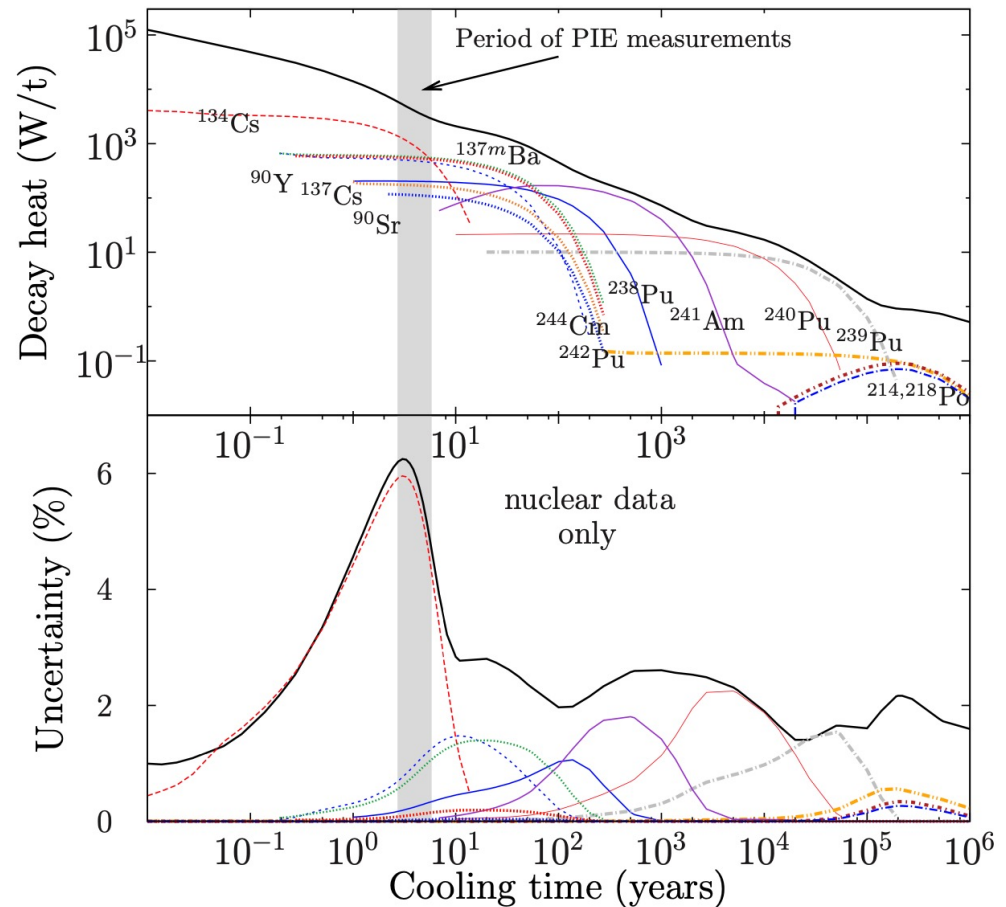
Target Accuracy Requirement from a neutronics aspect

- Proposal:
 - Obtain C/E and calculated for decay heat from CLAB, GE Morris and HEPL experiments

– Same for nuclide concentrations on PIE data

– Link between both

- ^{238}Pu ———
- ^{239}Pu - - - - -
- ^{240}Pu ———
- ^{242}Pu - - - - -
- ^{241}Am ———
- ^{244}Cm - - - - -
- ^{134}Cs - - - - -
- ^{137m}Ba - - - - -
- ^{137}Cs - - - - -
- ^{214}Po - - - - -
- ^{90}Sr - - - - -
- ^{90}Y - - - - -
- ^{218}Po - - - - -



Wir schaffen Wissen – heute für morgen

