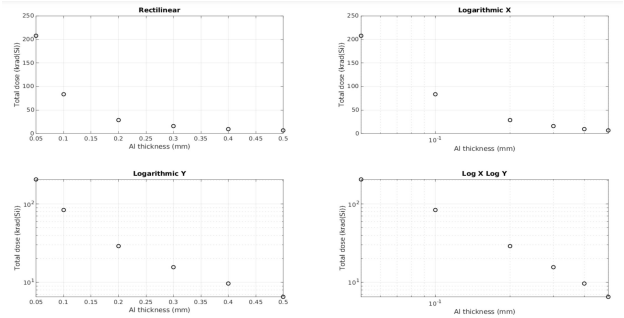
Scalable Asymmetric Lifecycle Engagement (SCALE)

- Attempts to restructure the way education is implemented and introduce students to radiation hardening early in their career paths



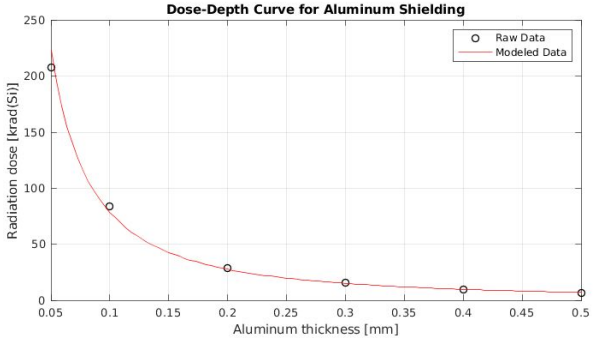
Problem Sets

axis scaling

- Radiation altitude
- Radiation shielding
- Total ionizing dose

repetition structures

- Sunspots
- Radiation dosing
- Microchip selection



nonlinear regression,
user defined functions

```
%%file Axx_Shielding_Surface_Density_UDF_login.m

% create your function header below with the appropriate inputs and outputs
function [H] = shieldingSurfaceDensityUDF_login(surface_density)

    % define a variable as the density of aluminum, given above
    density_Al = 2.7*10^(-3);

    % calculates aluminum thickness using H = px/p_Al
    H = surface_density ./ density_Al;
```

data selection, tables

```
for i = 1:length(SEL_index)
    for lcv = 1:length(TID_index)
        if SEL_index(i) == TID_index(lcv)
            match = [match; SEL_index(i)];
        end
    end
end
```