EE618
CMOS ANALOG IC DESIGN

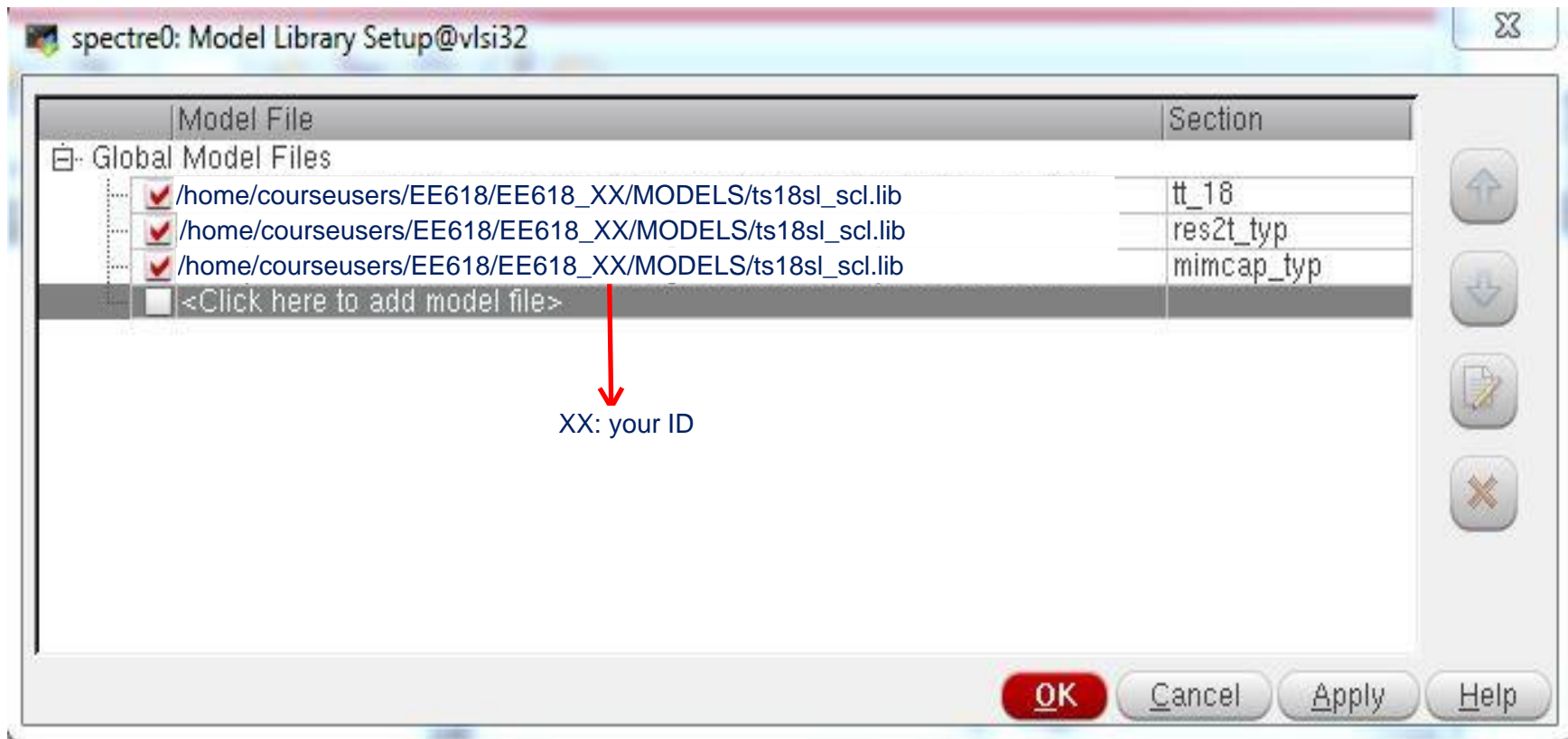# Process Corner/Temperature Simulations In cadence Spectre

Model Libraries for SCL 180nm

- The Model libraries for SCL designkit is found in below path :

/home/courseusers/EE618/EE618_XX/MODELS/ts18sl_scl.lib

- This has models for MOS, Resistors, Caps, Diodes etc.
- The default sections are as follows:
  - MOS   : tt_18
  - RESISTOR   : res2t_typ
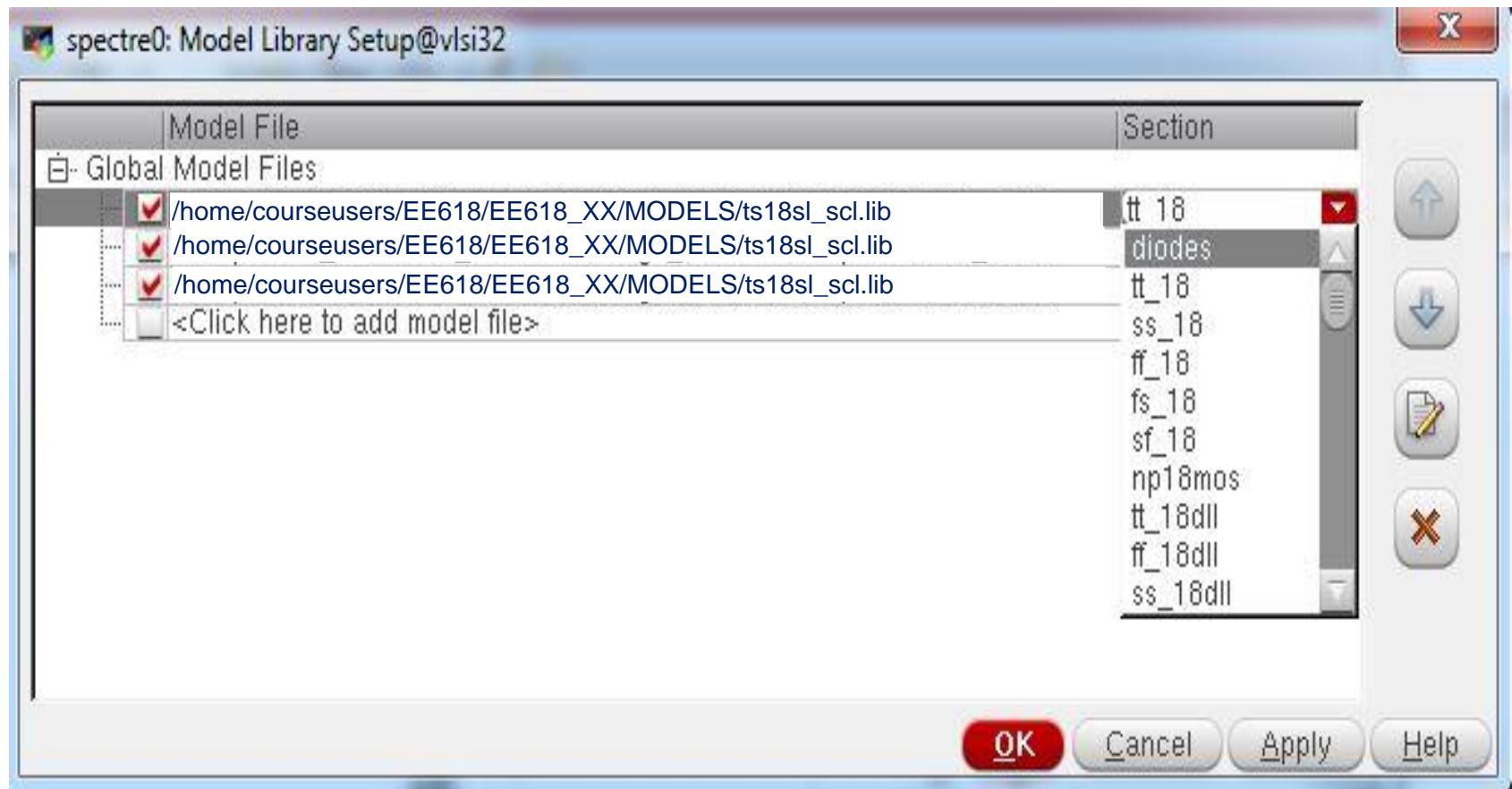 - CAPACITOR : mimcap_typ

Changing the Process Corner
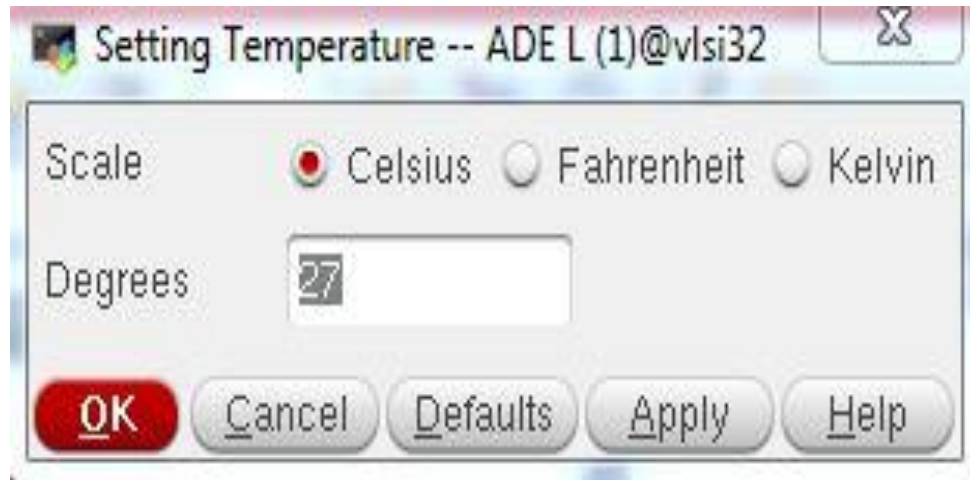
Changing the Process Corner

- MOSFET has five process corners, namely TT,SS,FF,FS and SF (Typical, Slow N Slow P, Fast N Fast P, Fast N slow P and Slow N fast P).

- To change the process corner -> ADE -> Setup -> Model Libraries -> Add the model path (as in prev slide) -> In dropdown choose tt_18/ss_18/ff_18 for TT, SS and FF corners respectively. (Figure in next slide)
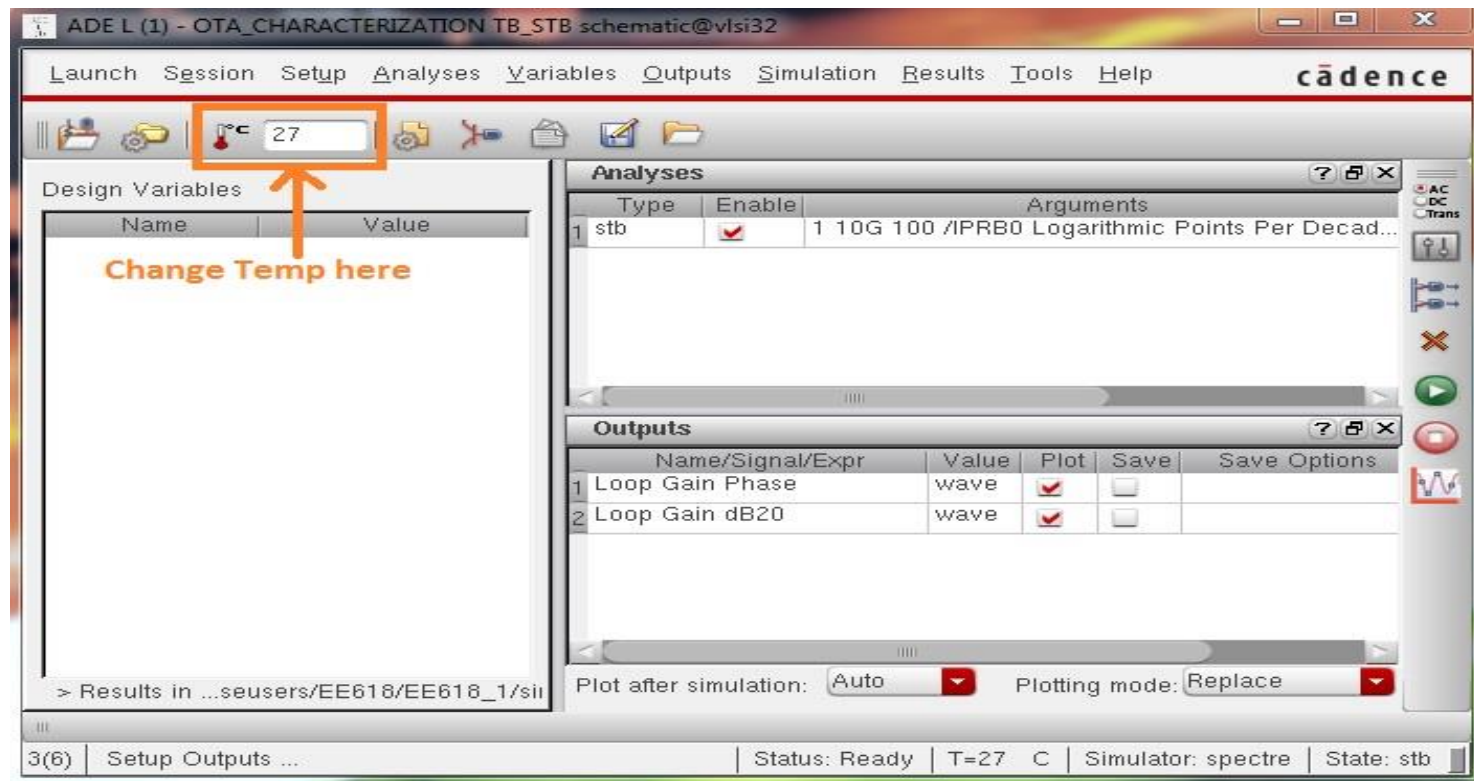
Changing the Process Corner

Changing Temperature

- Two ways to change Temperature in ADE.
- Method 1 :
  - ADE -> Setup -> Temperature -> Put in temp value in celsius

Changing Temperature

- Method 2:
  - In ADE Window top left corner:

END