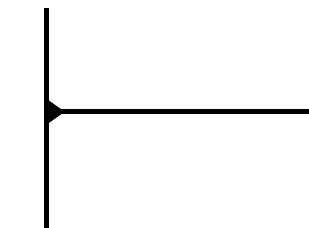
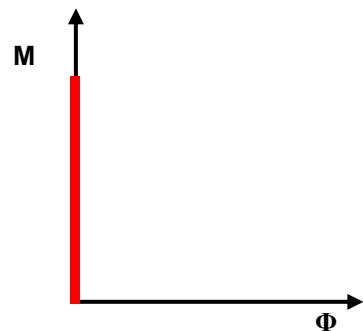


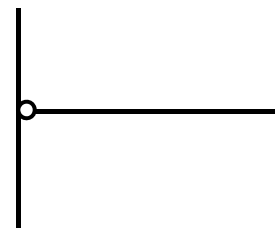
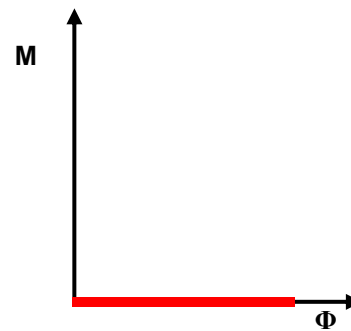
# ANALYSIS AND MODELLING

- Global analysis
  - Three simplified joint models:
    - Simple – no moment transmit
    - Continuous – behaviour of the joint may be assumed to have no effect on the analysis
    - Semi-continuous – behaviour of the joint needs to be taken into account in the analysis

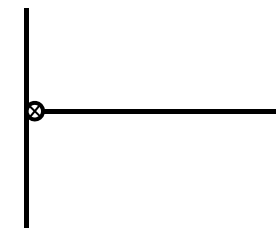
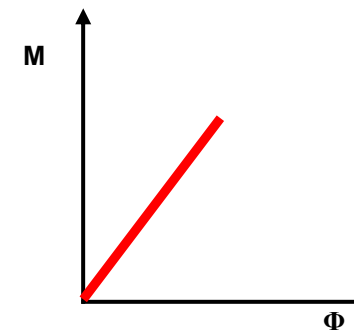
# Joints Classification by stiffness



(a) Rigid Joint ( $\Phi=0$ )



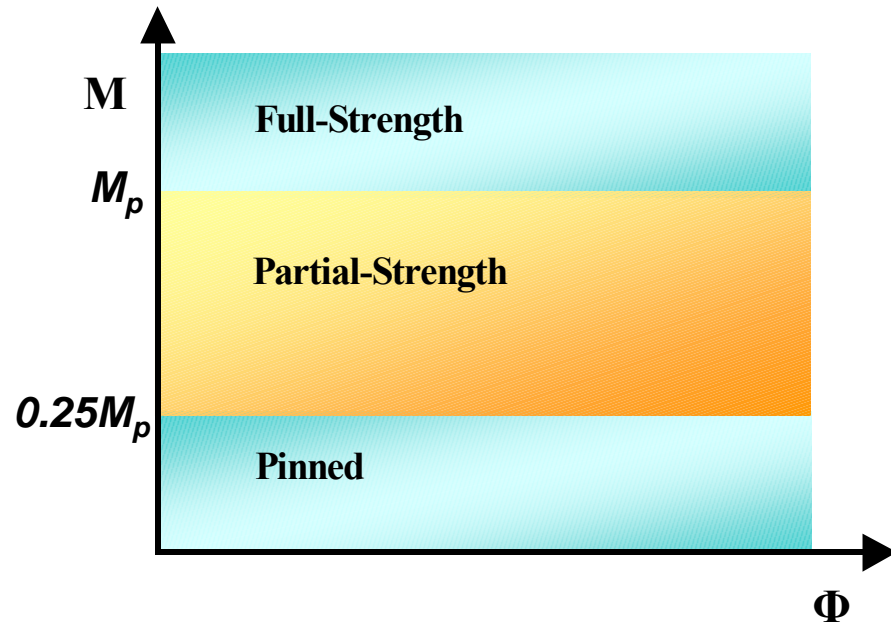
(b) Pinned Joint ( $M=0$ )



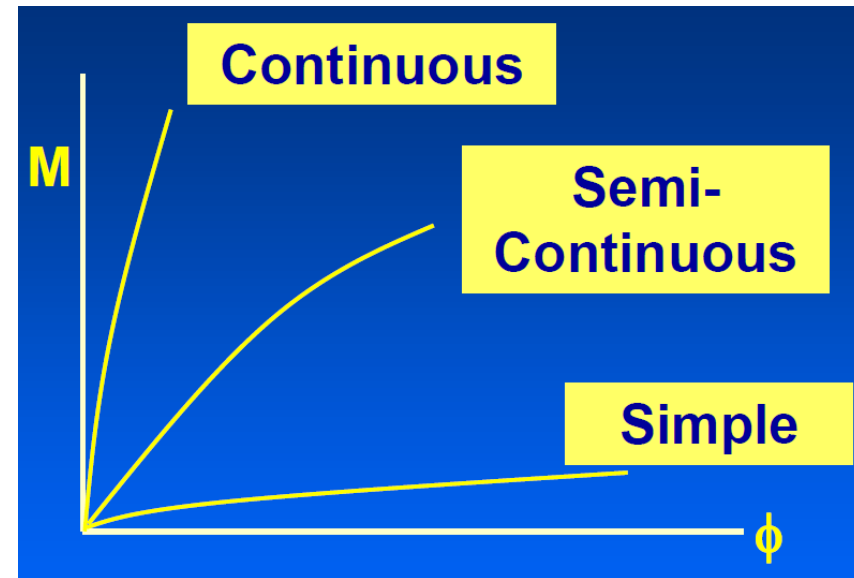
(c) Semi-rigid Joint ( $M$  and  $\Phi \neq 0$ )

## Modelling joints for elastic global analysis

## JOINT MODELLING



Joints Classification  
by strength



EC3-1-8 provides information on the  $M-\phi$  relationships for semi-continuous joints