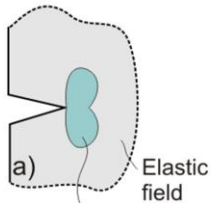


$$N = 1/2$$

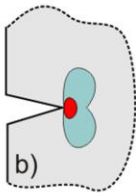
$$\uparrow \int \Delta \sigma$$



Monotonic  
Plastic Zone

$$N = 1$$

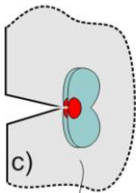
$$\uparrow \downarrow \Delta \sigma$$



Cyclic  
Plastic Zone

$$N = 2$$

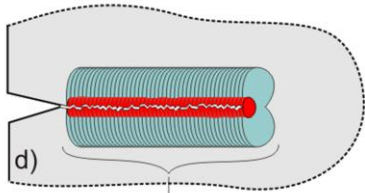
$$\uparrow \downarrow \uparrow \downarrow \Delta \sigma$$



Shifting Plastic Zone  
(with progressing  
crack tip)

$$N = Z$$

$$\uparrow \downarrow \Delta \sigma$$



Plastically strained material at both crack  
flanks, in the wake of crack growth