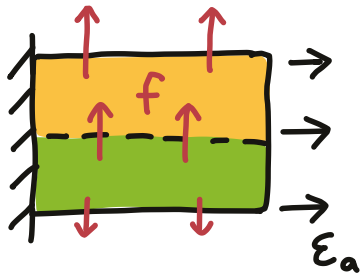
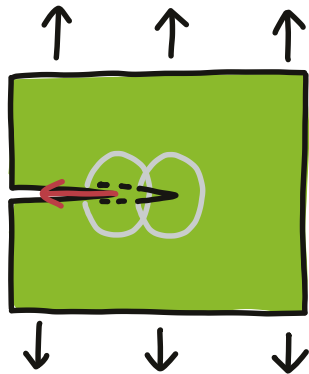
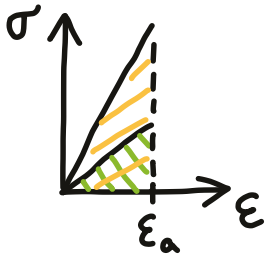


7 configurational force f



bi-material



crack tip