



**Around permanent regime**

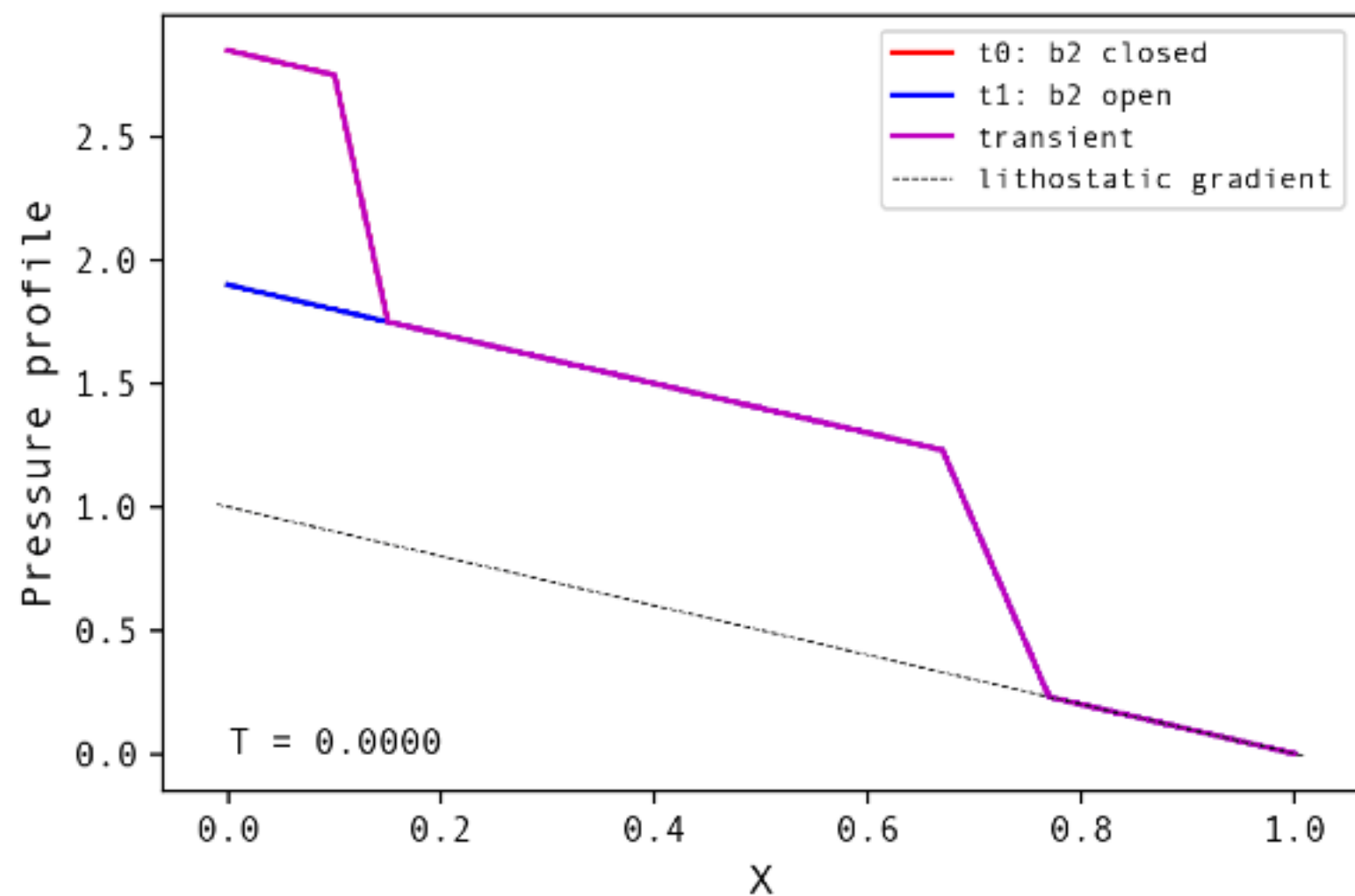
***(b) QP boundaries: transient from valve breaking***

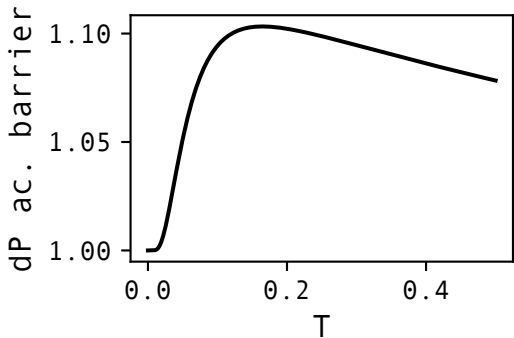
# Experiment:

- Init. equilibrium pore-pressure profile when 2 valves are closed, but valve nb1 is open ( $k_b = k_{bg}$ ).
- Observe the propagating transient

## Observation:

- transient progresses from one valve to the other, to redistribute total  $dP$  on background segments and barriers.
- $dP$  across remaining valve and overpressure are increased (closer to failure?)
- The increase is transient, overpressure will progressively dissipate when fluid has crossed the low permeability barrier

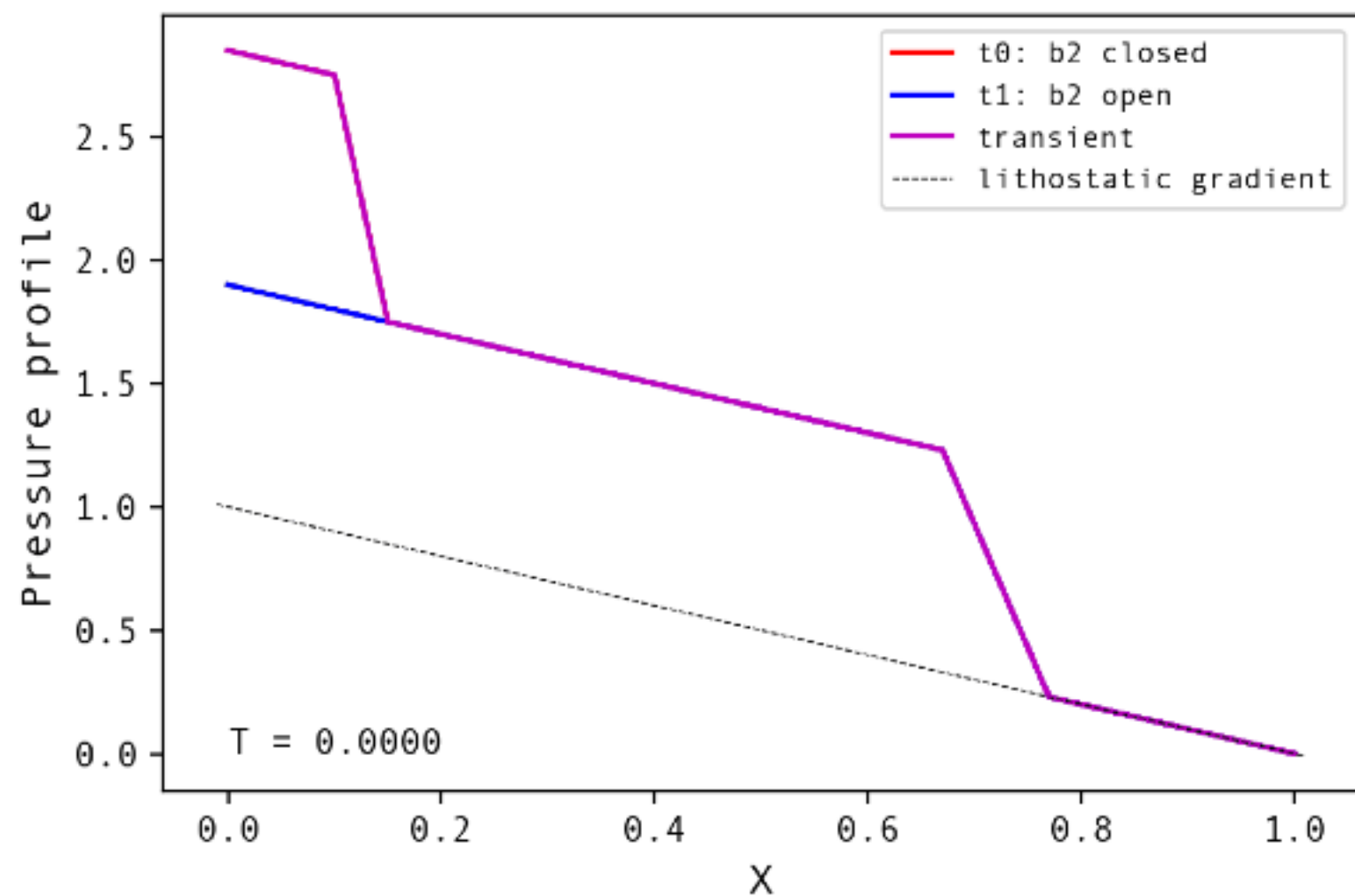


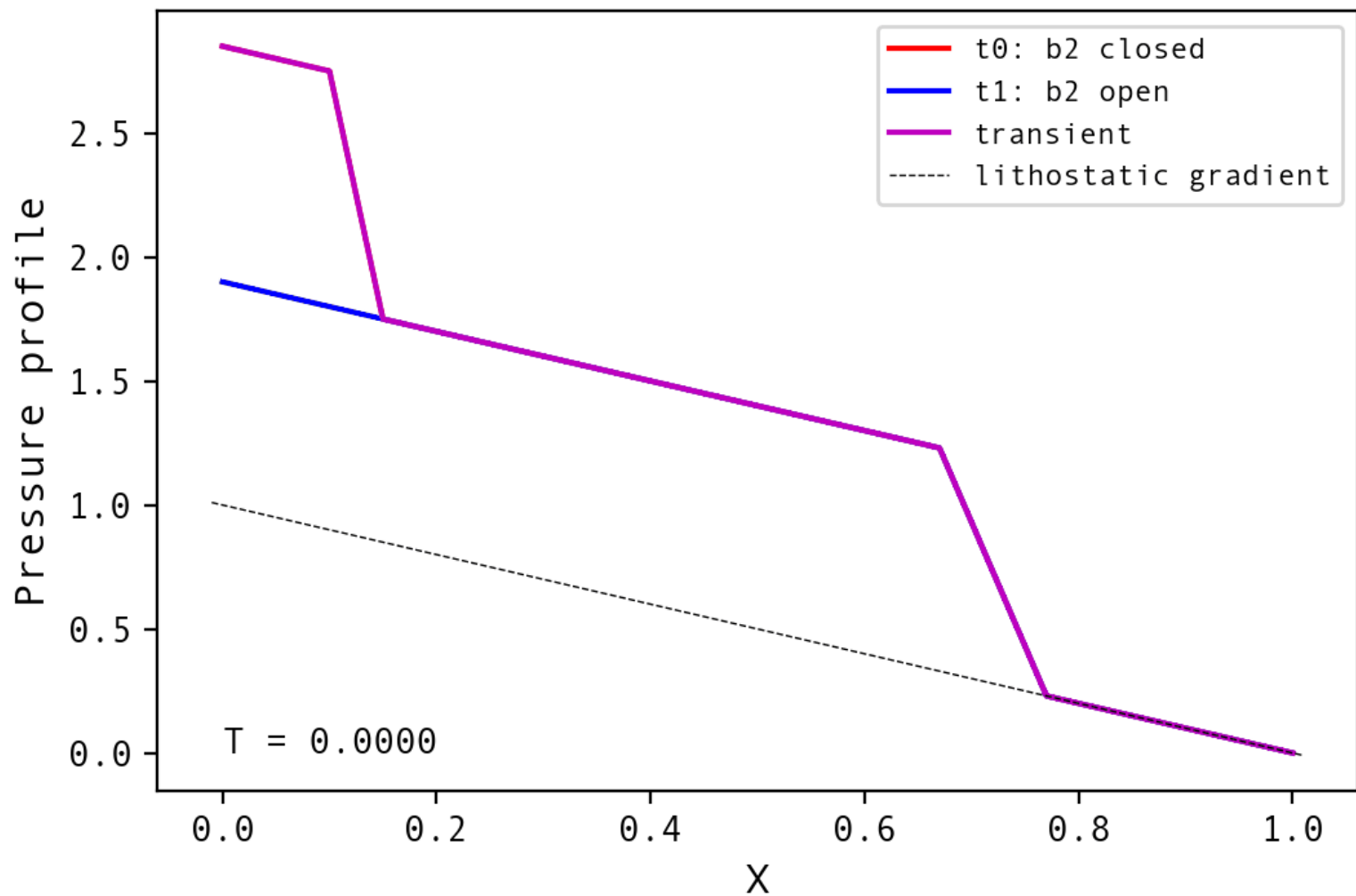




this is a gif, click on it to play







# Around permanent regime

## *(b) QP boundaries: transient from valve breaking*

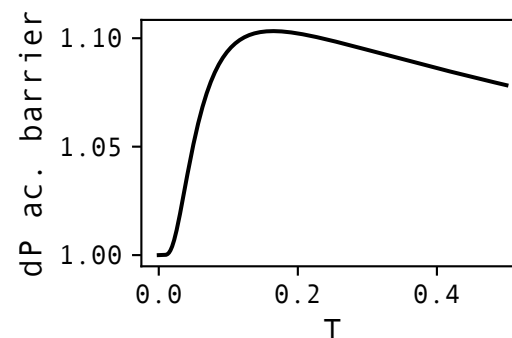
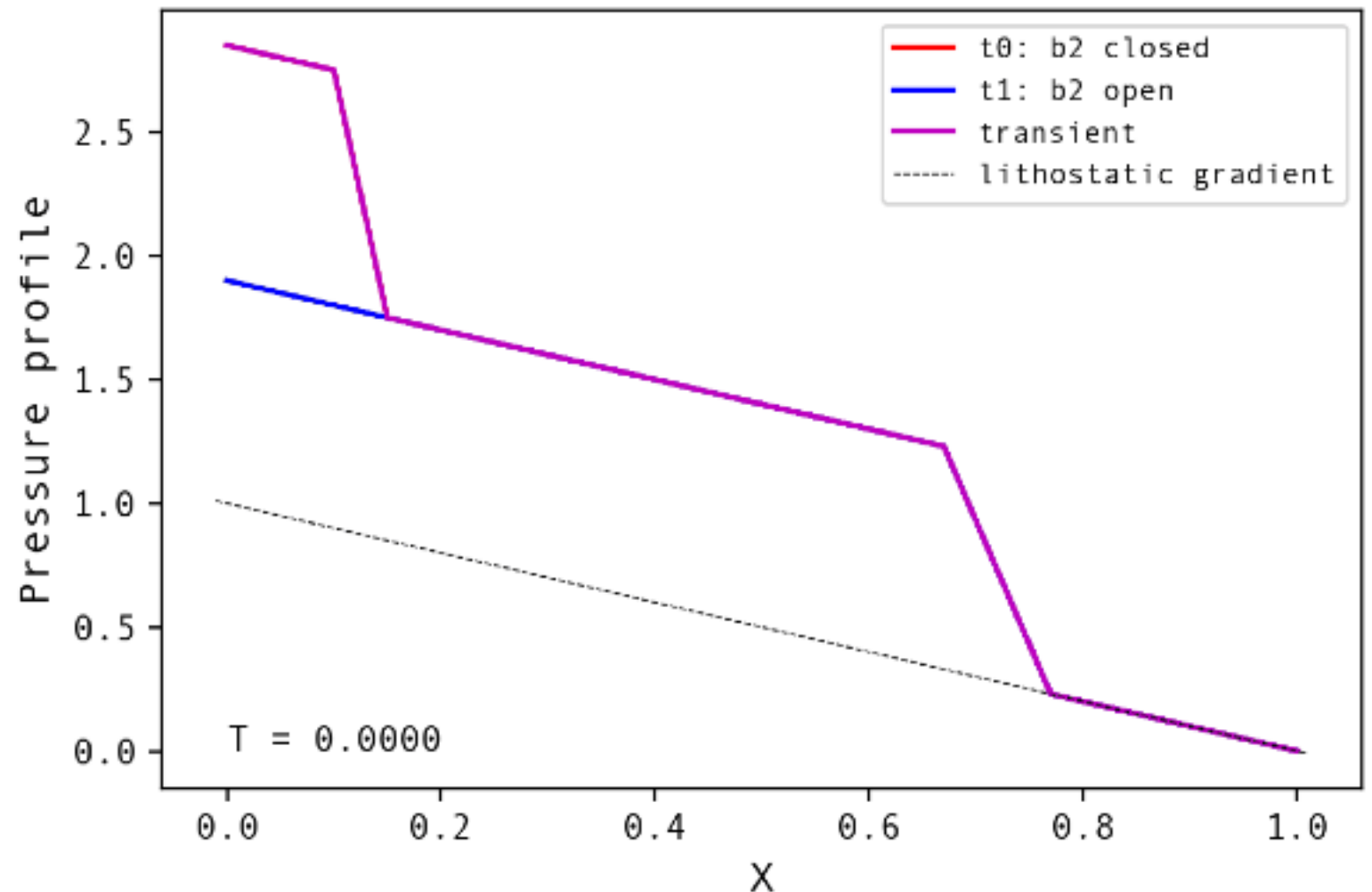
↓ this is a gif, click on it to play

### Experiment:

- Init. equilibrium pore-pressure profile when 2 valves are closed, but valve nb1 is open ( $k_b = k_{bg}$ ).
- Observe the propagating transient

### Observation:

- transient progresses from one valve to the other, to redistribute total dP on background segments and barriers.
- dP across remaining valve and overpressure are increased (closer to failure?)
- The increase is transient, overpressure will progressively dissipate when fluid has crossed the low permeability barrier



# Around permanent regime

## *(b) QP boundaries: transient from valve breaking*

↓ this is a gif, click on it to play

### Experiment:

- Init. equilibrium pore-pressure profile when 2 valves are closed, but valve nb2 is open ( $k_b = k_{bg}$ ).
- Observe the propagating transient

### Observation:

- transient progresses from one valve to the other, to redistribute total dP on background segments and barriers.
- dP across remaining valve and overpressure are increased (closer to failure?)
- The increase is transient, overpressure will progressively dissipate when fluid has crossed the low permeability barrier

