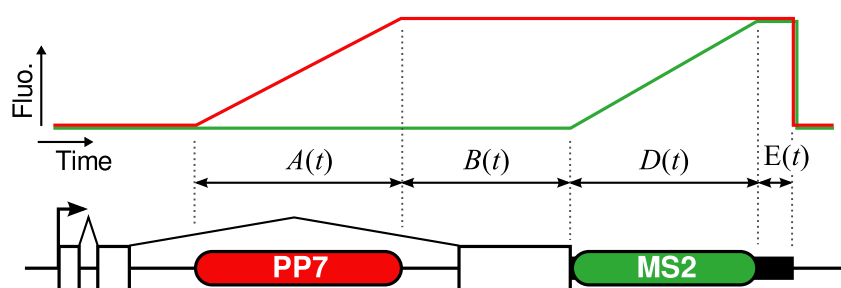


Scheme I

All splicing is post-release



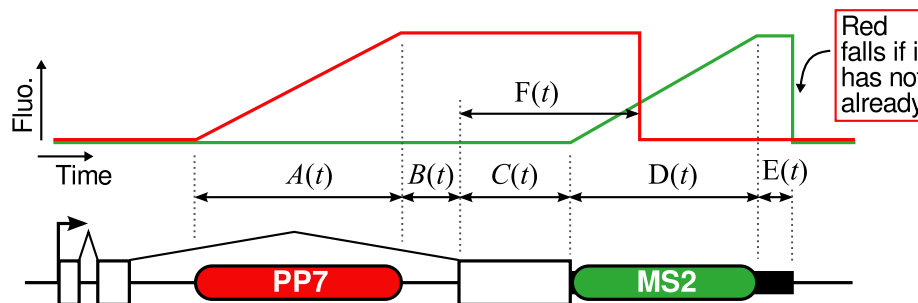
Causality relationships
(after RNAP passed 3'ss)

~~Splicing~~

Elongation → Release

Scheme II

Splicing & transcription/release are independent

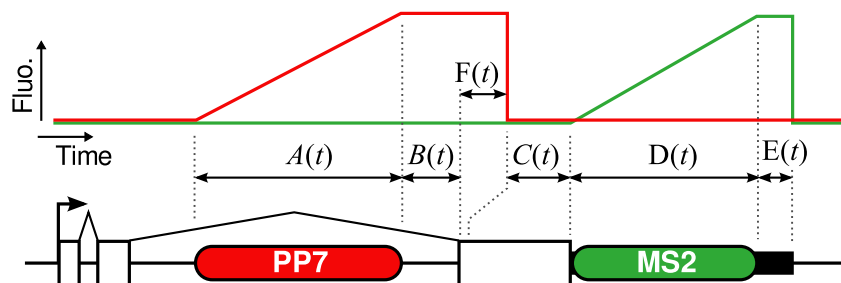


Splicing

Elongation → Release

Scheme III

Elongation pauses at 3'ss until intron is spliced

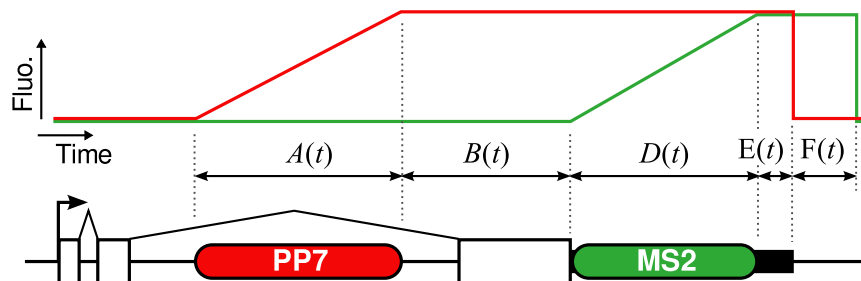


Splicing

↙
Elongation → Release

Scheme IV

Splicing happens after exon 3' end/poly(A) site is reached

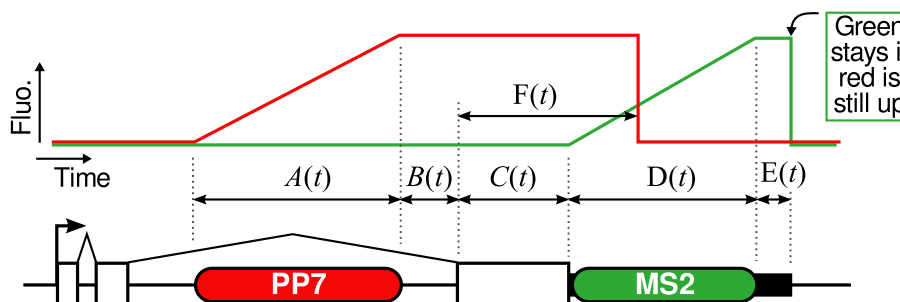


Splicing

↗
Elongation → Release

Scheme V

Transcript is retained at the 3' end until spliced



Splicing

Elongation → Release

→ : Kinetic constraint
----- : Kinetic independence

No checkpoint

Checkpoints