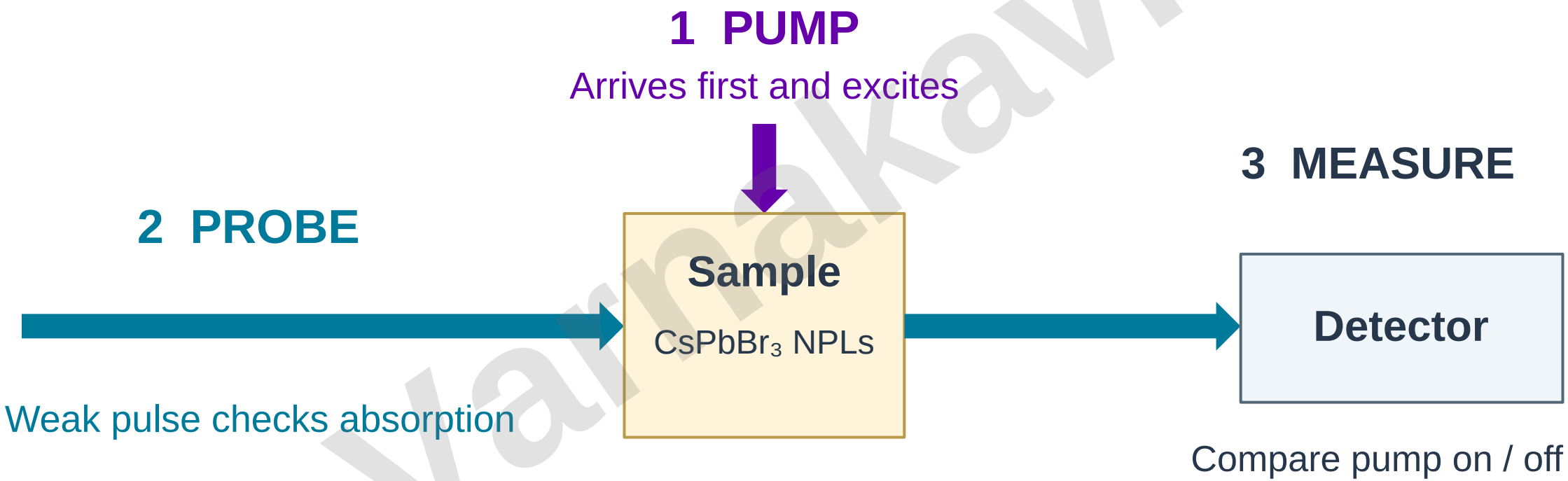
Transient absorption in one picture

A pump excites the sample. A delayed probe measures what changed.



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Repeat at different delays to follow the excited state over time.

What happens between the pump and probe?

A pulse is a very short burst of light. 1 femtosecond (fs) = 10^{-15} s.



During the delay

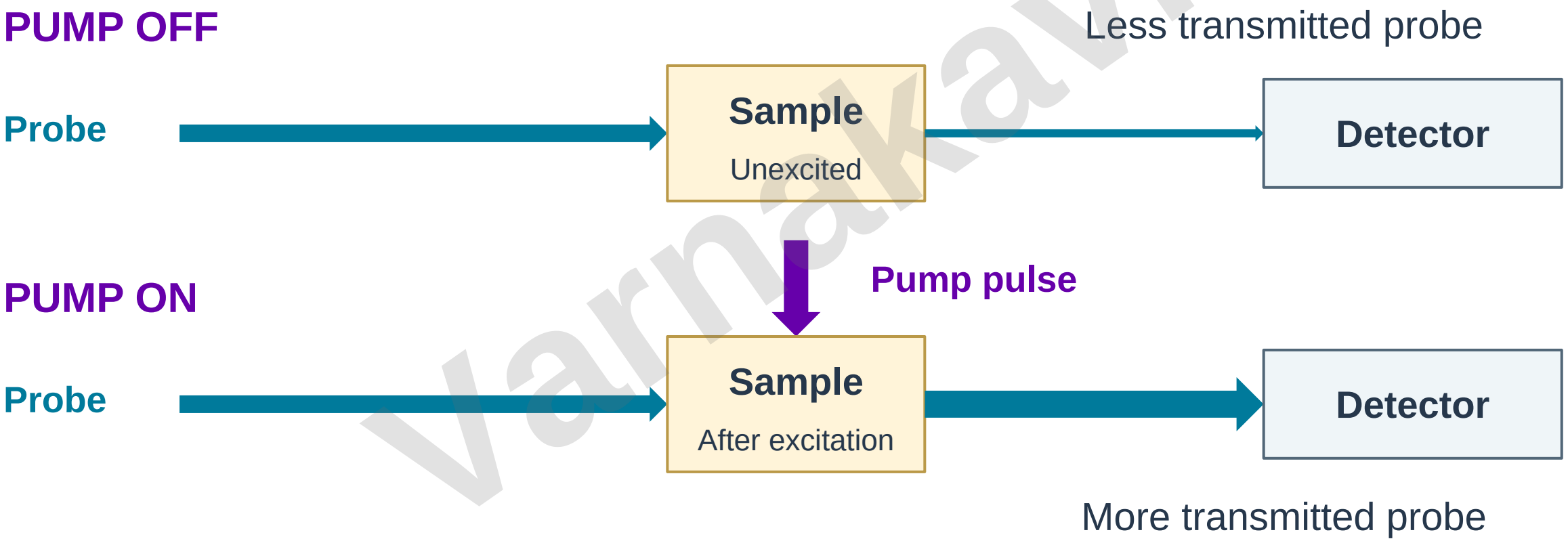
Excited carriers can lose energy, become trapped, or recombine.

Repeat at different delays to build a picture of the excited-state dynamics.

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How the probe detects a bleach

At about 458 nm, less absorption gives a negative ΔA.



Vary the delay to follow bleach buildup and recovery.

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