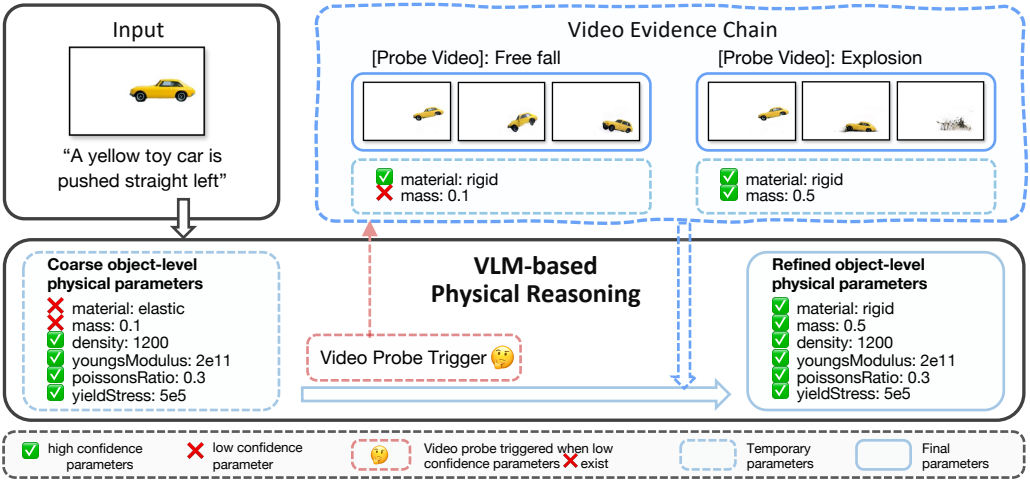
Input
"A yellow toy car is pushed straight left"
Video Evidence Chain
[Probe Video]: Free fall
material: rigid
mass: 0.1
[Probe Video]: Explosion
material: rigid
mass: 0.5
Coarse object-level physical parameters
material: elastic
mass: 0.1
density: 1200
youngsModulus: 2e11
poissonsRatio: 0.3
yieldStress: 5e5
VLM-based Physical Reasoning
Video Probe Trigger
Refined object-level physical parameters
material: rigid
mass: 0.5
density: 1200
youngsModulus: 2e11
poissonsRatio: 0.3
yieldStress: 5e5
high confidence parameters
low confidence parameter
Video probe triggered when low confidence parameters exist
Temporary parameters
Final parameters