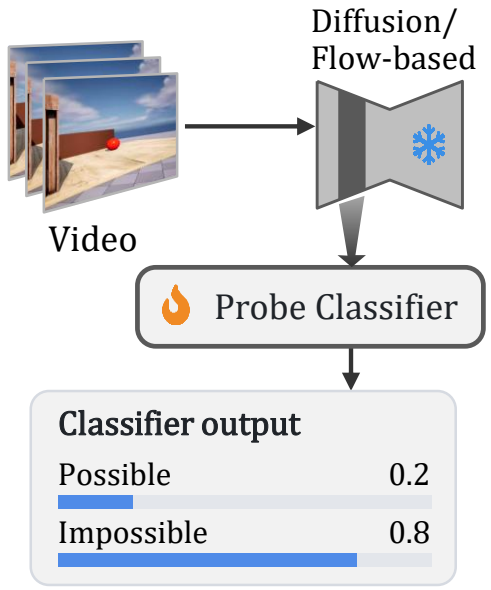
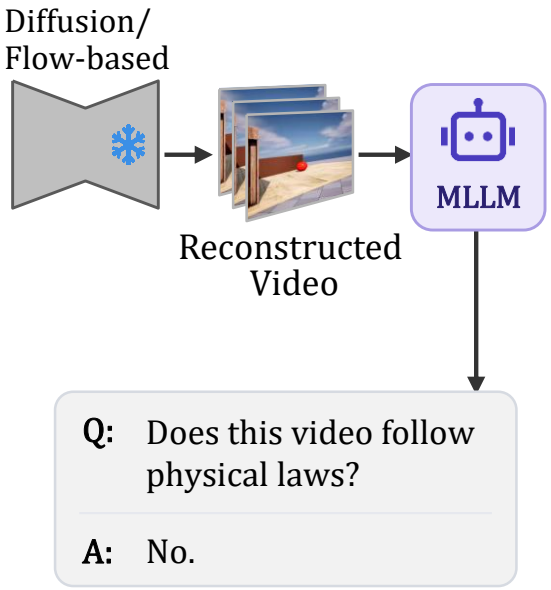
Representation Probing



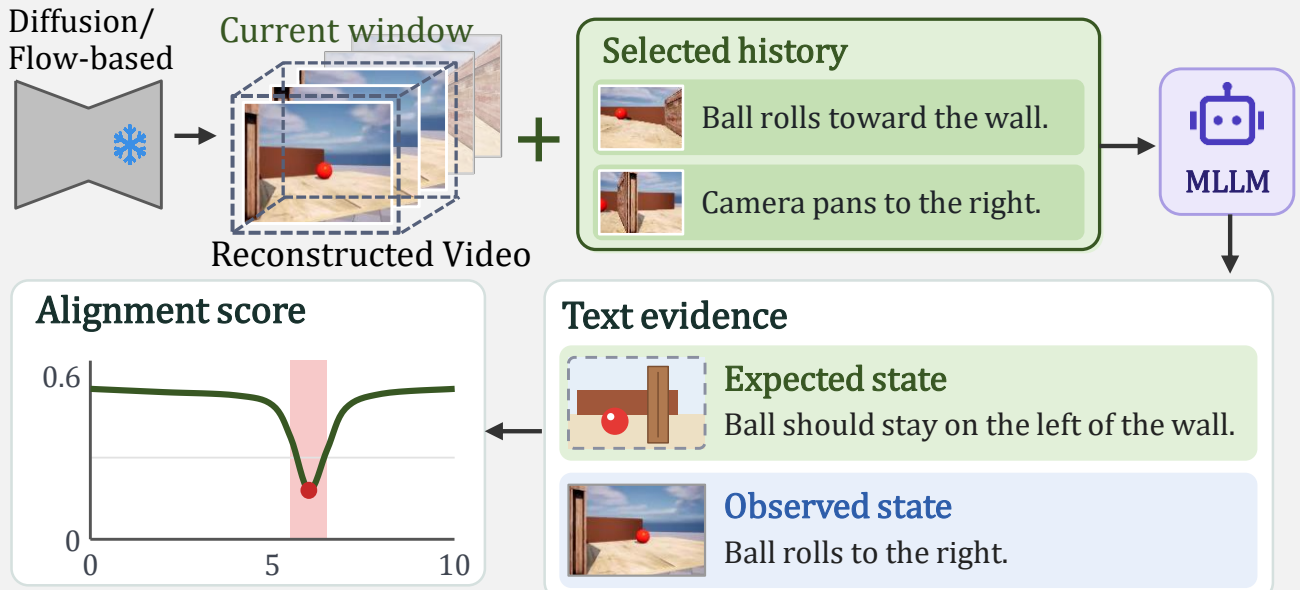
- ✗ Training-free
- ✗ Video-level explainable
- ✗ Violation localization
- △ Long-term memory
- ✗ Expectation Tracking

MLLM Judgment



- ✓ Training-free
- ✓ Video-level explainable
- △ Violation localization
- △ Long-term memory
- ✗ Expectation Tracking

PhysTrace



- ✓ Training-free
- ✓ Video-level explainable
- ✓ Violation localization
- ✓ Long-term memory
- ✓ **Expectation Tracking**