Photon–Atom Cascading Systems
Real-Time Quantum State Visualization

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Abstract

A photon–atom cascading architecture enabling real-time visualization of quantum-adjacent excitation states is introduced.

1 Cascade Energy

$$\Delta E = h\nu_{in} - \sum_i h\nu_{out,i} \tag{1}$$

2 Optical Encoding

$$\Delta E \to RGBA(t) \tag{2}$$