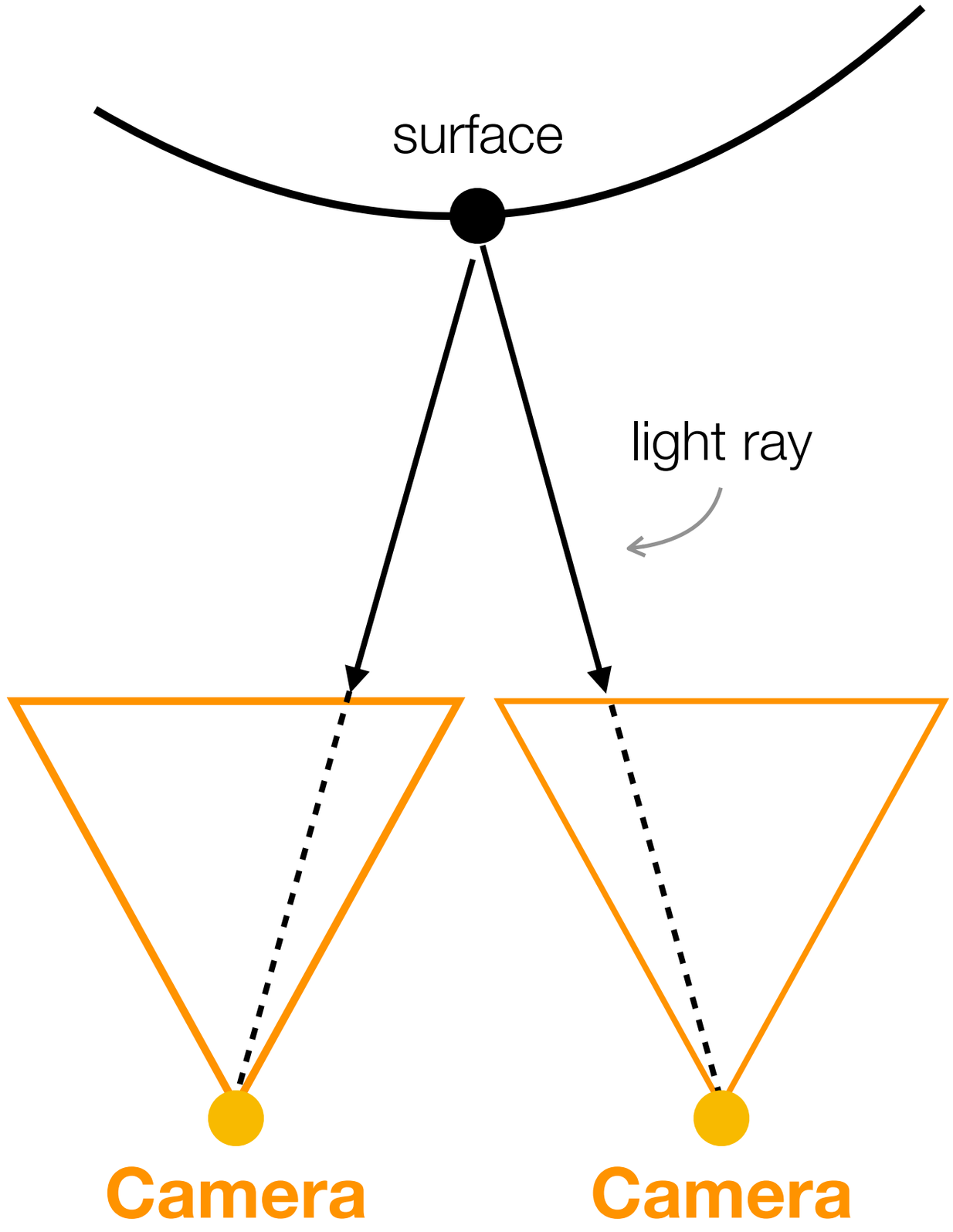
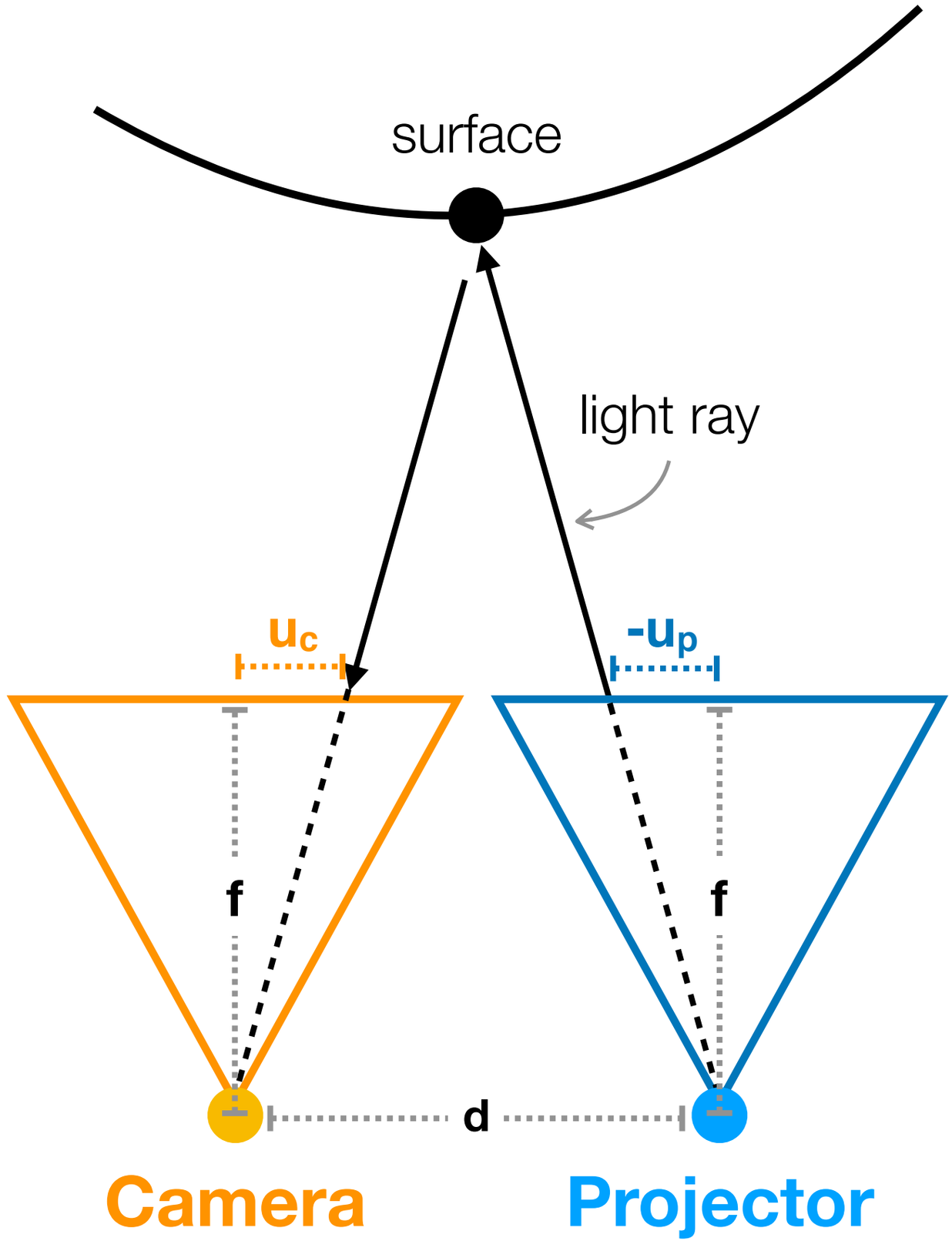
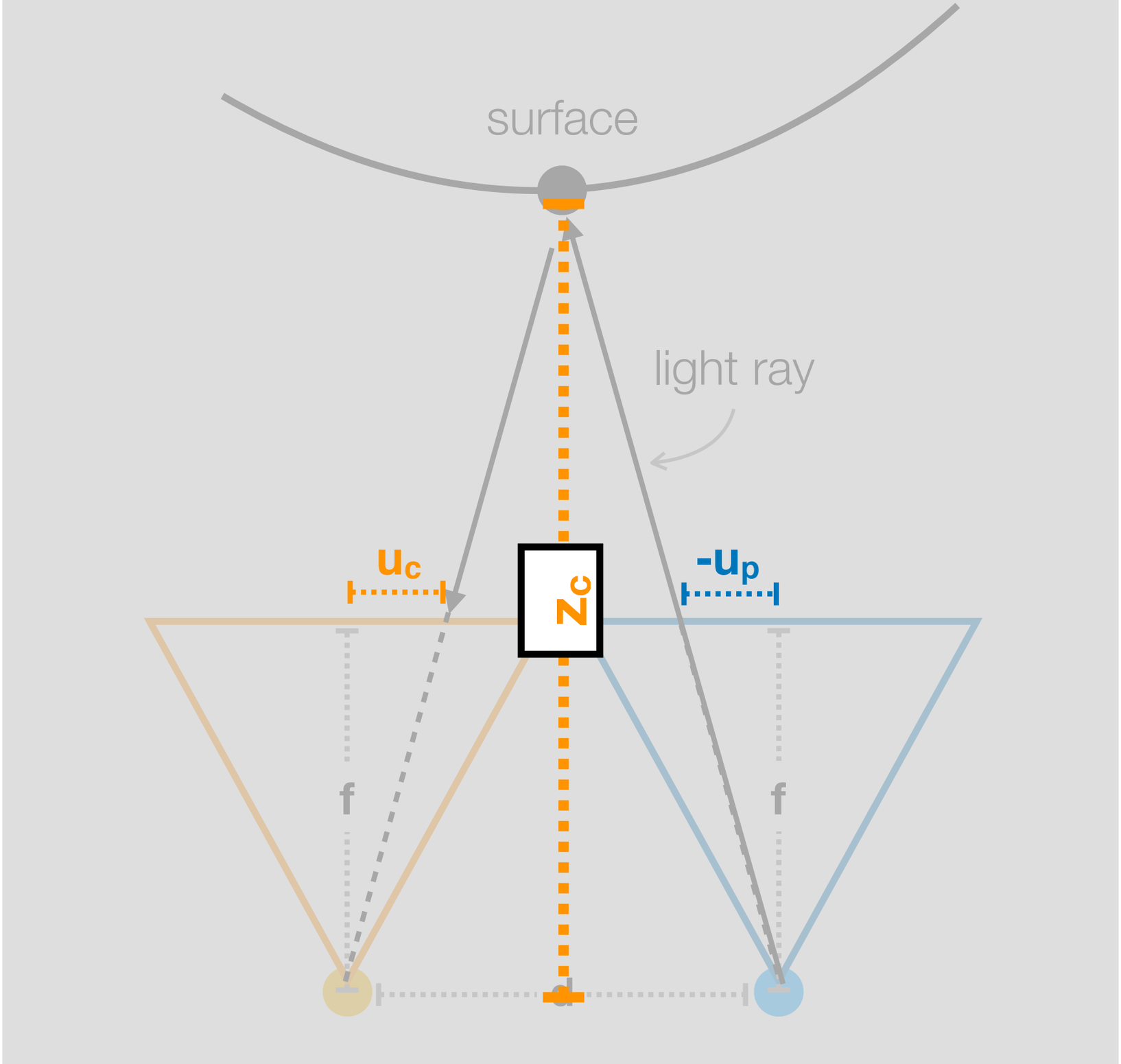
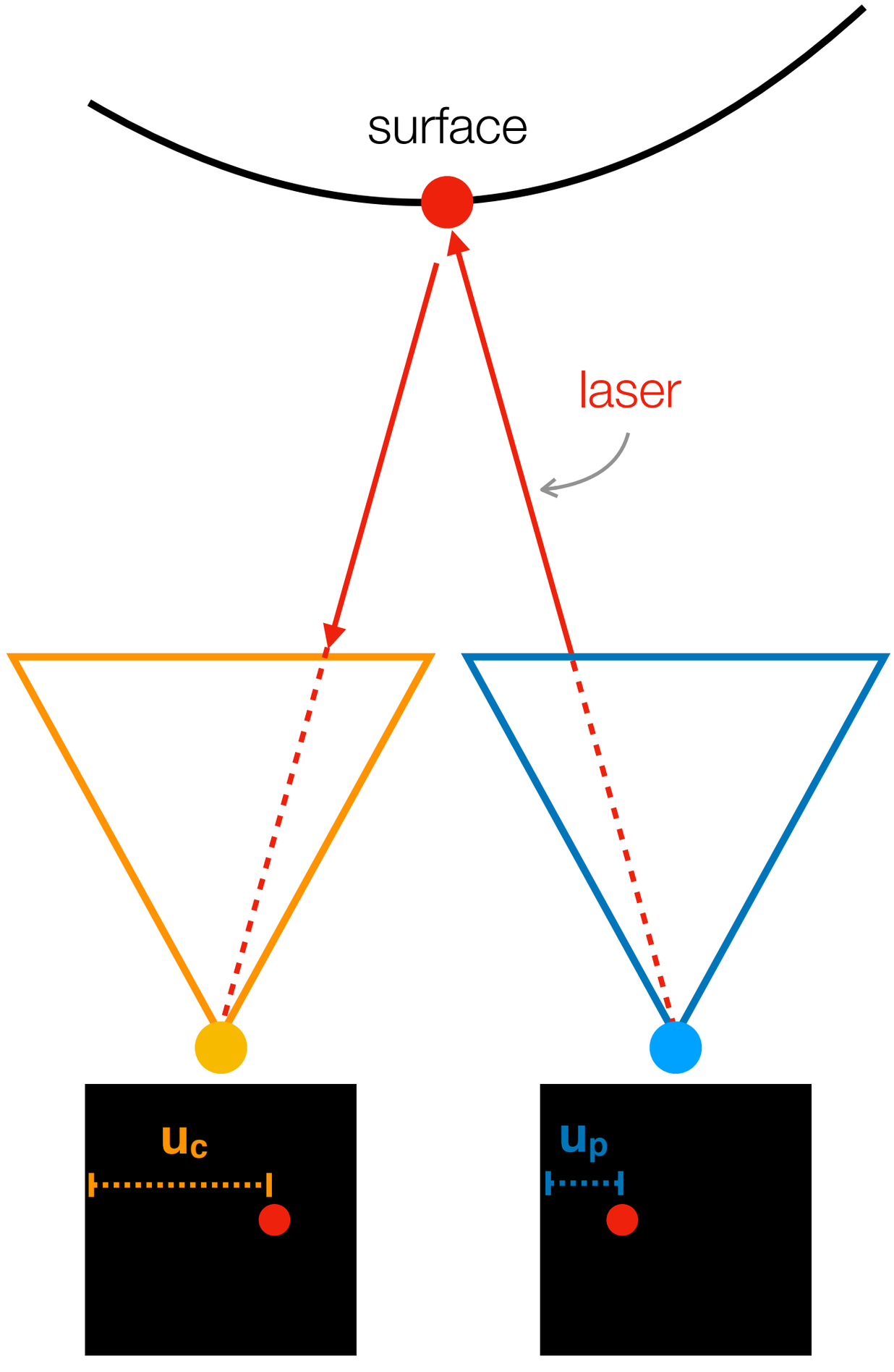

surface
light ray
Camera
Camera

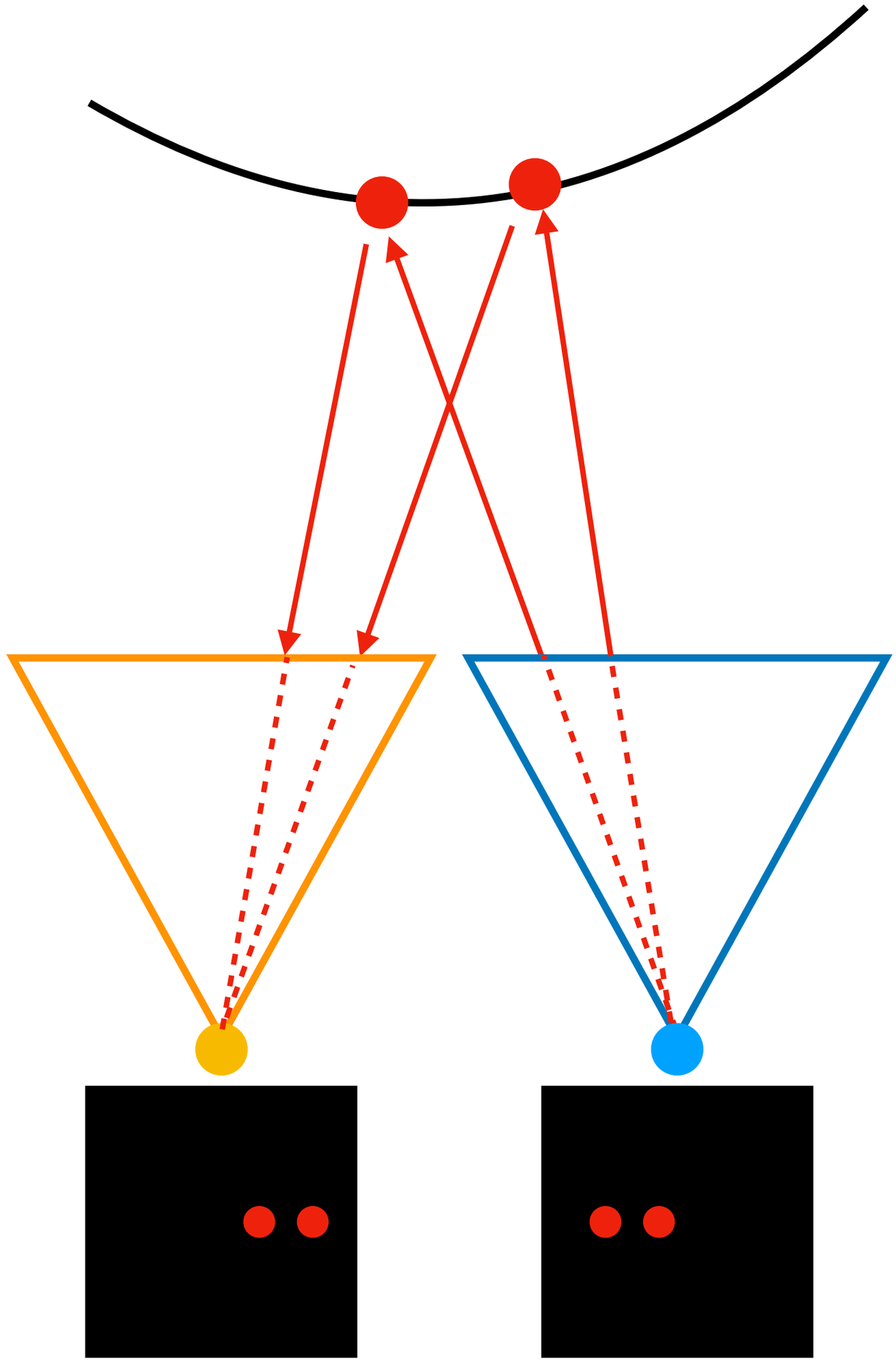
XBOX 360
Projector
Camera

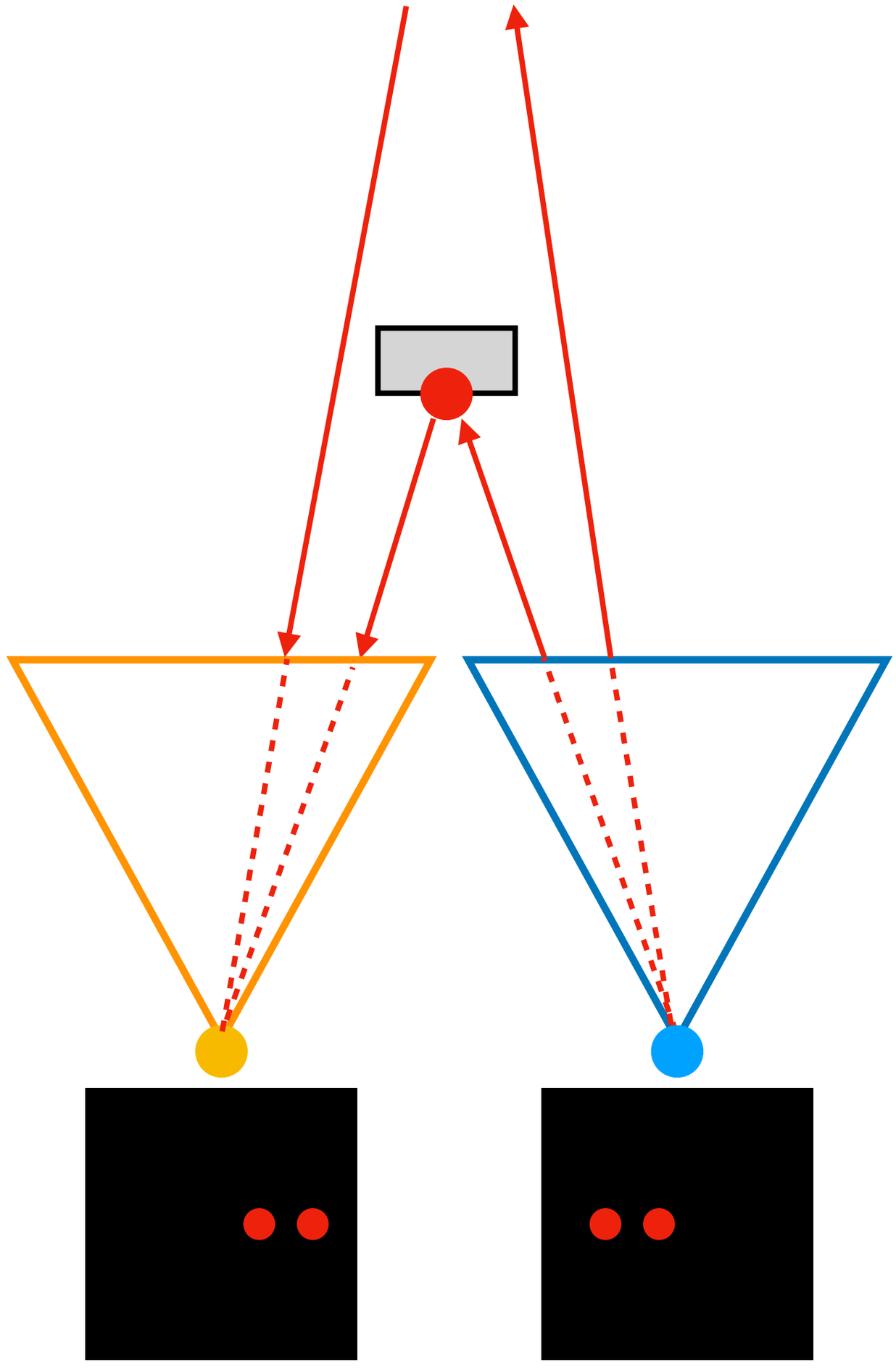

surface
light ray
u_c
$-u_p$
f
f
d
Camera
Projector

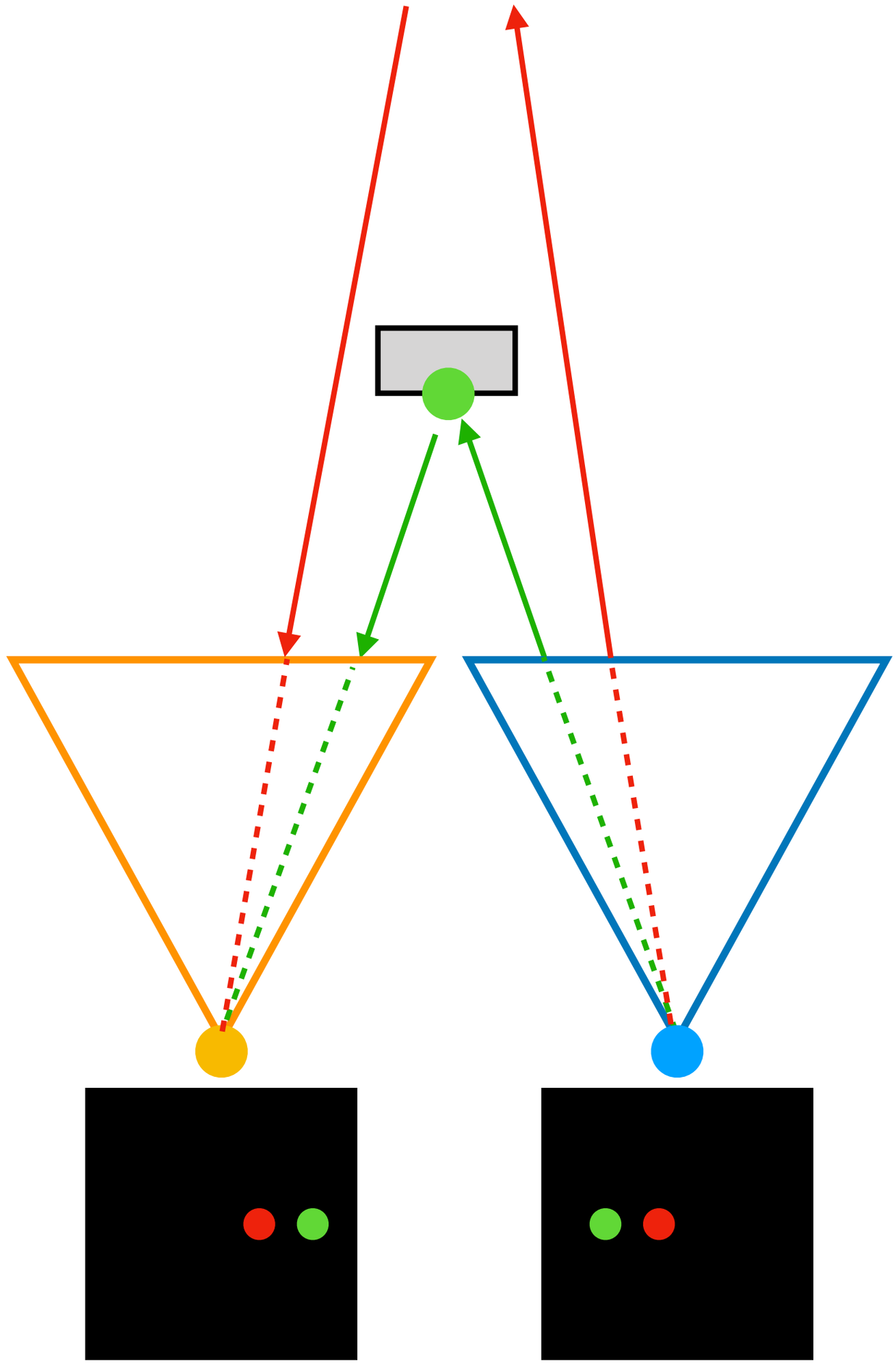


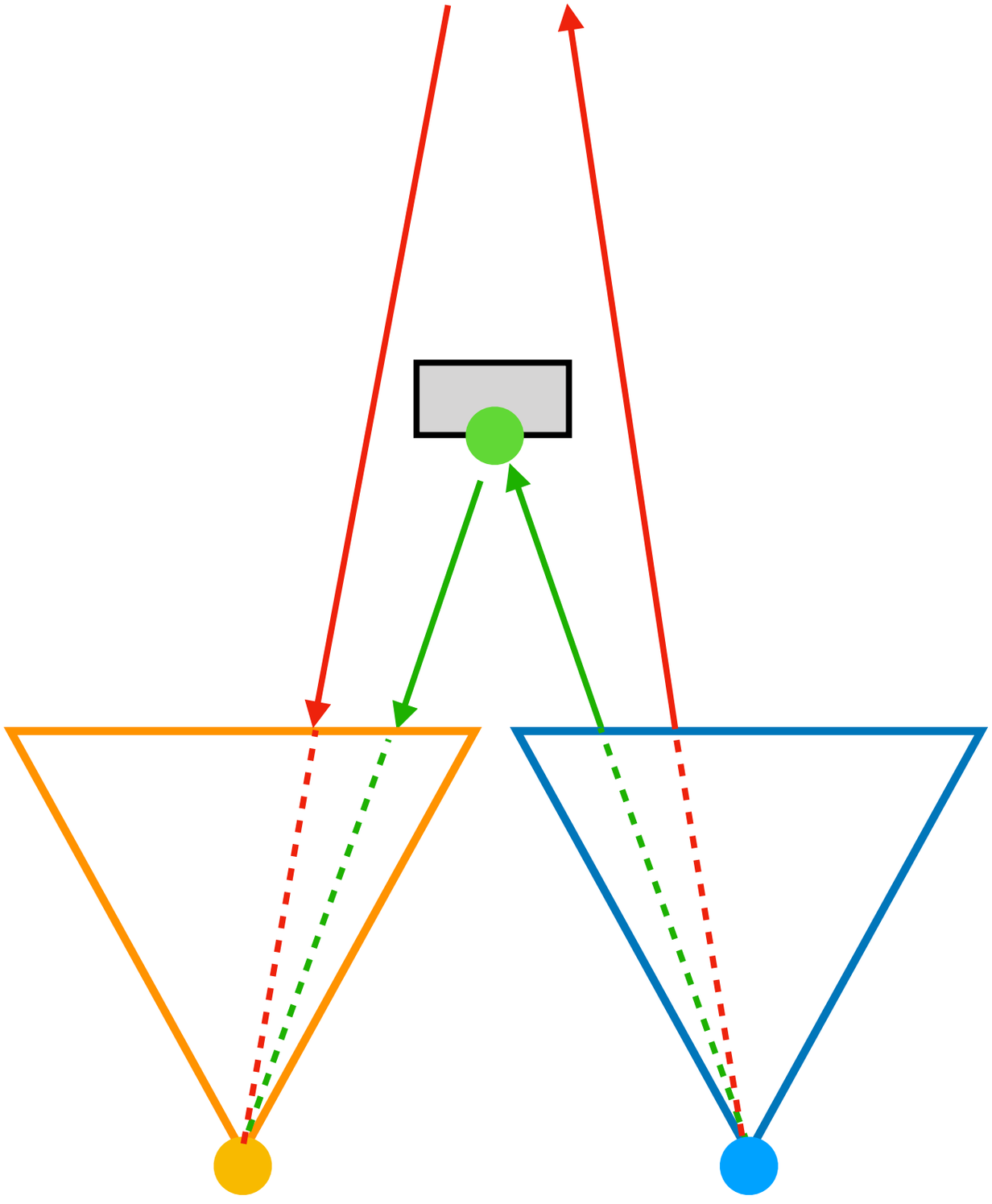
If we know u_c, u_p, f, and d, we can infer depth z_c

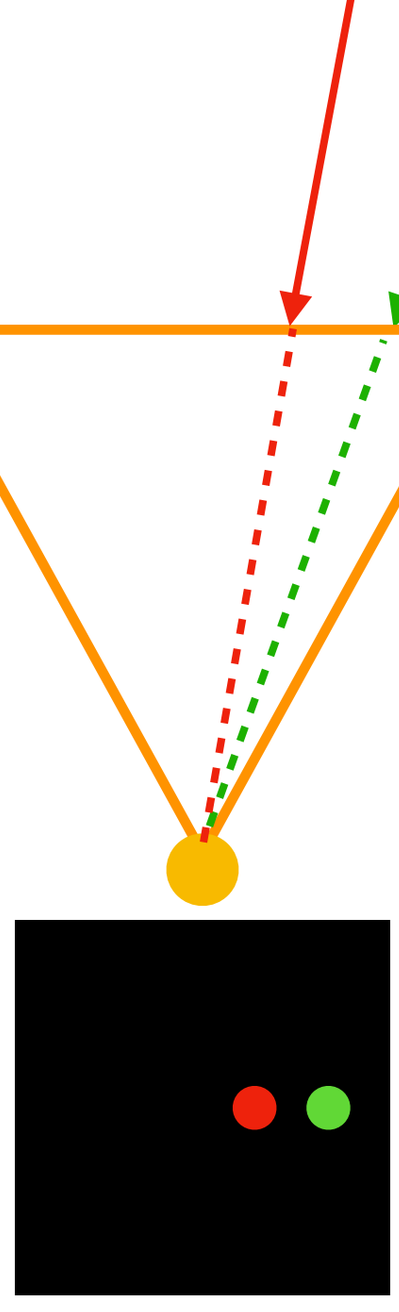

surface
laser
u_c
u_p

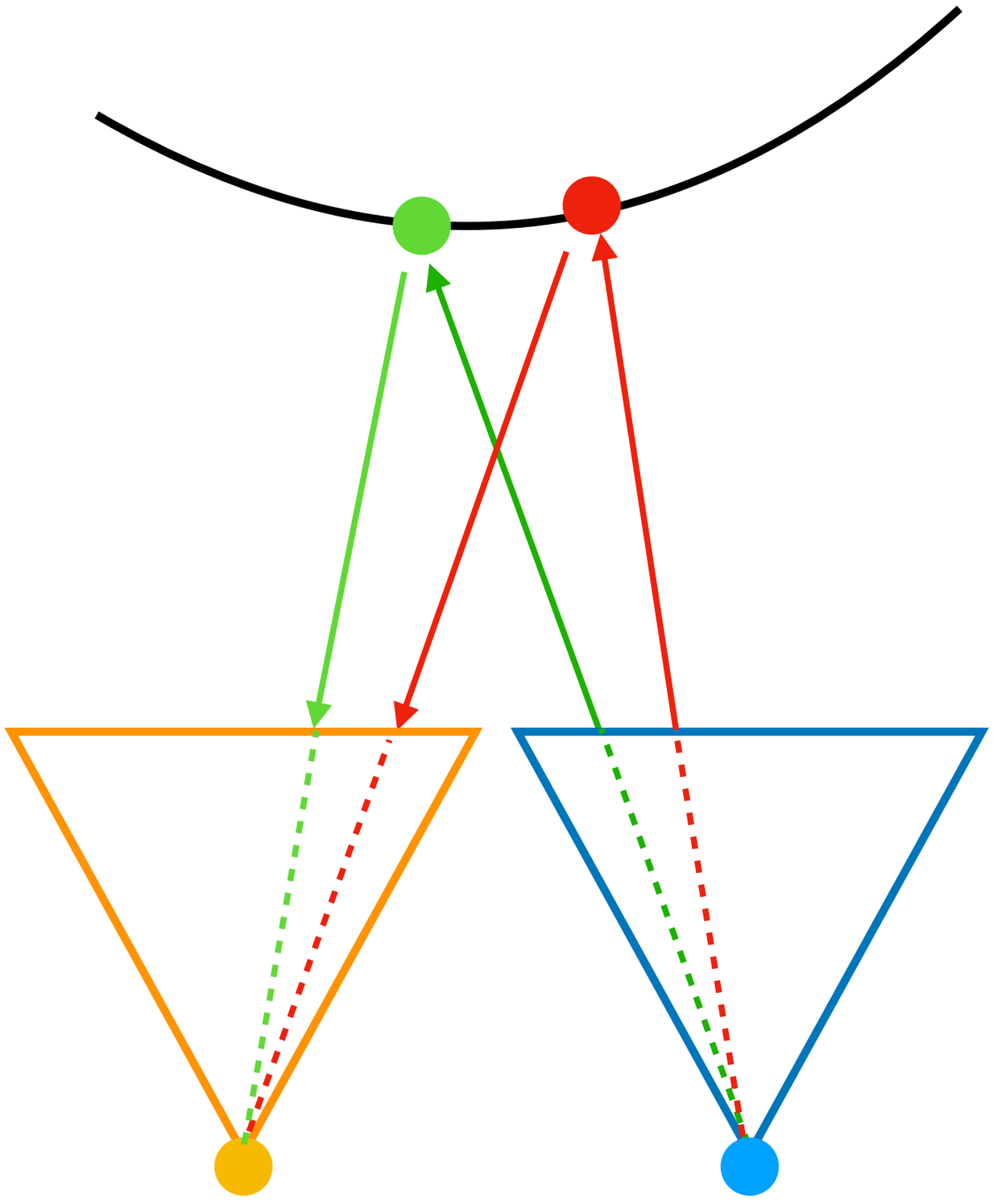


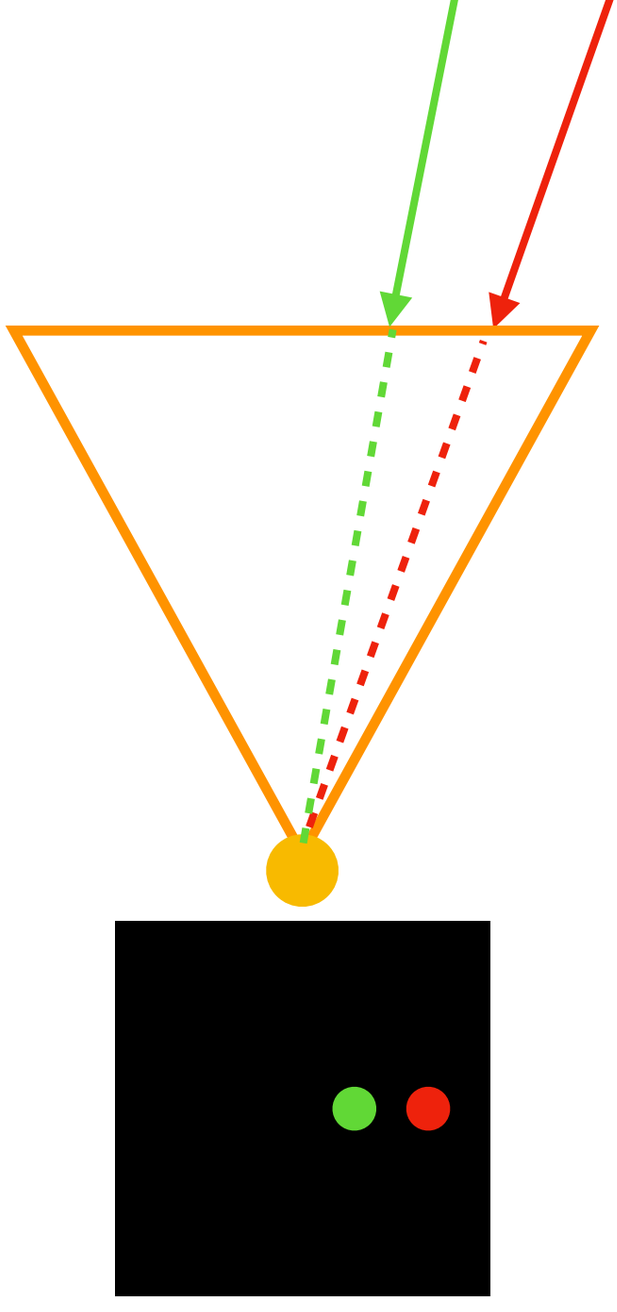




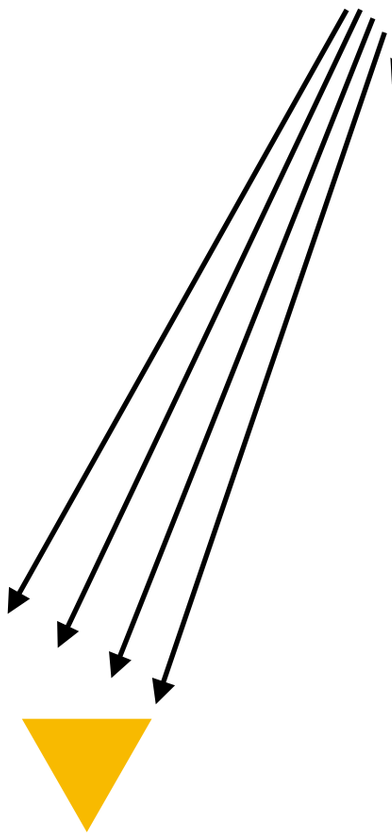


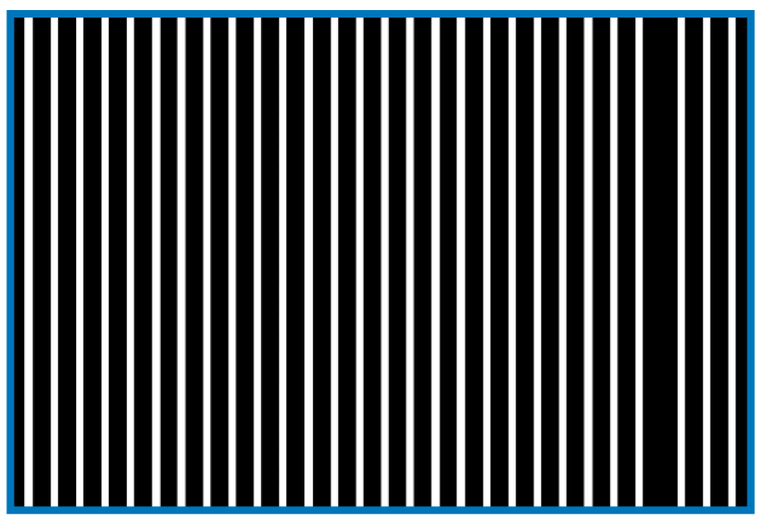


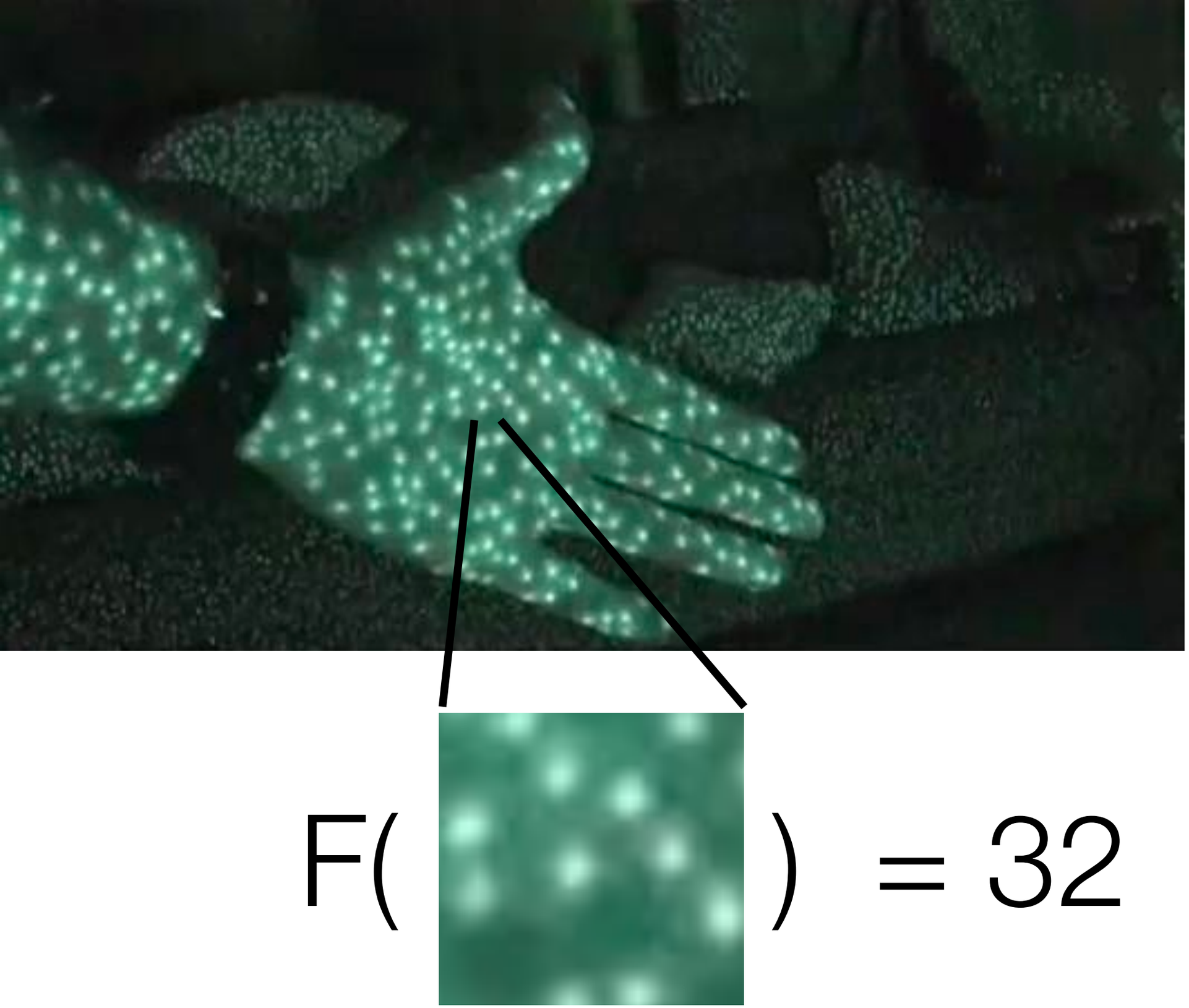




world







F( ) = 32

F recognizes that this is the pattern that the projector projected at u_p=32 pixels.