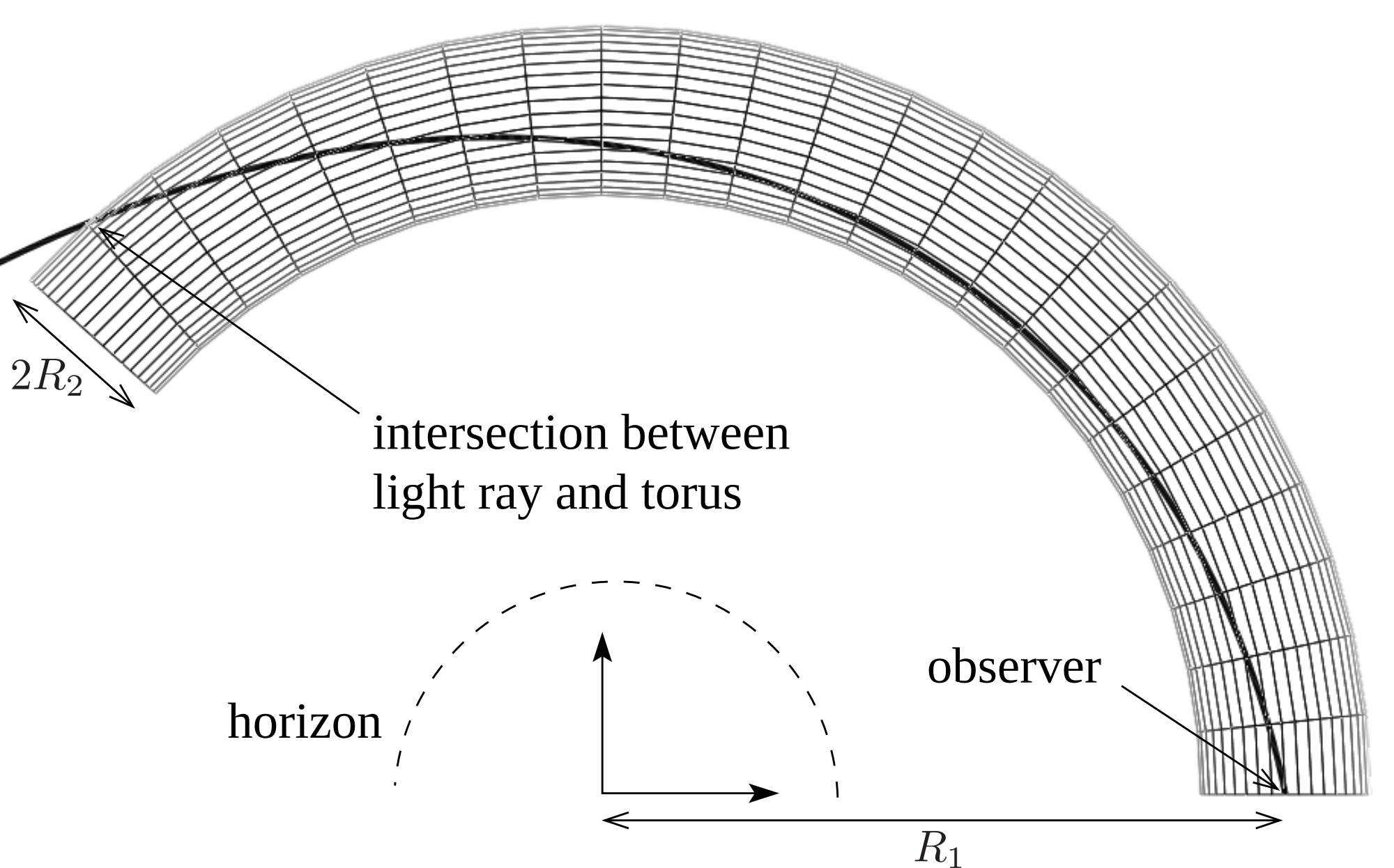
$2R_2$
intersection between
light ray and torus
horizon
observer
R_1