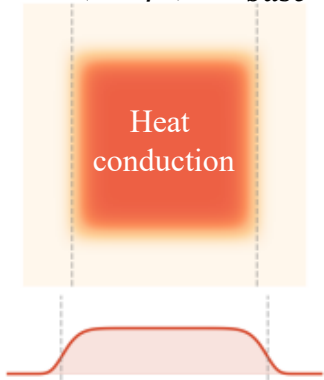


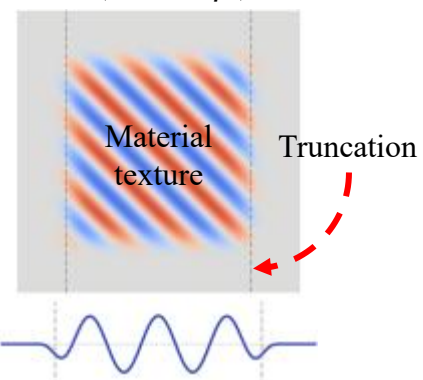
Adaptive Spatial Support \mathcal{S}

$$\mathcal{S}(\mathbf{x} | \beta) \cdot \omega_{base}$$

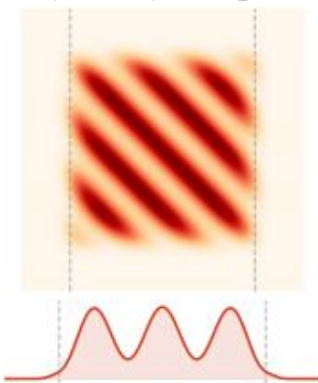


Spectral Modulation Field \mathcal{F}

$$\mathcal{F}(\mathbf{x} | \omega, \phi)$$



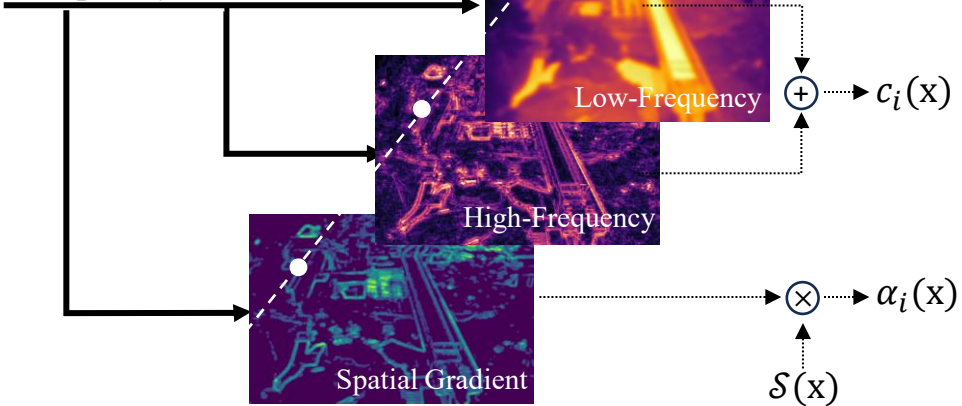
Physically Coupled



Unified Primitive

$$P = \mathcal{S}(\mathbf{x} | \beta) \odot \mathcal{F}(\mathbf{x} | \omega, \phi)$$

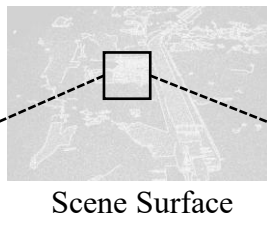
Frequency-Aware G-Buffer



Frequency Map



View 1

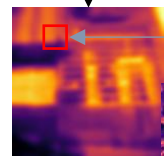


Scene Surface

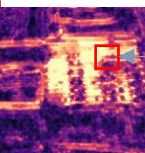


View 2

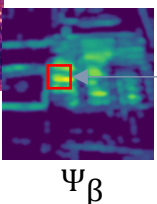
Frequency Map



Ψ_{low}



Ψ_{high}



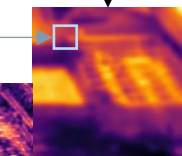
Ψ_{β}



Ψ_{β}

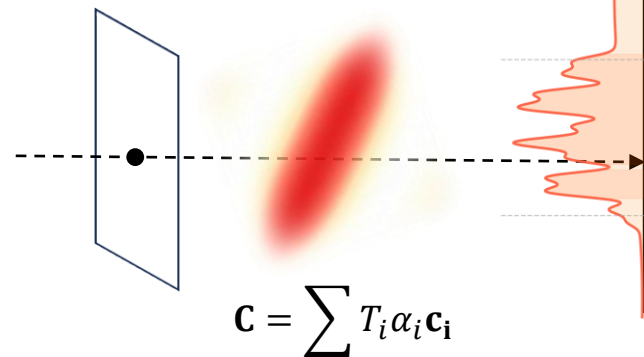


Ψ_{high}



Ψ_{low}

Ray Space



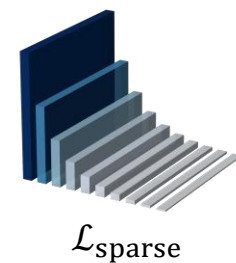
$$\mathbf{C} = \sum T_i \alpha_i \mathbf{c}_i$$



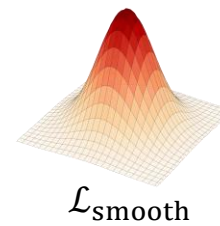
Synthesized Image



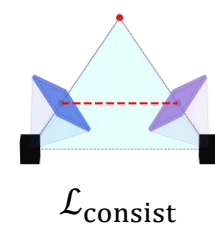
Reference Image



\mathcal{L}_{sparse}



\mathcal{L}_{smooth}



$\mathcal{L}_{consist}$