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OpticalComponent< T, U >
# std::unique ptr< Optical
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Surface< T, U > > surface

# OpticalComponentType type

+ OpticalComponent(std

::unique\_ptr< OpticalSurface < T, U > > surface, OpticalComponent Type type)

+ virtual ~OpticalComponent

()=default

+ const vec3< T > & getPosition

() const + const vec3< T > & getNormal () const U > \* getSurfacePtr()

+ OpticalSurface< T, + OpticalComponentType getType() const + virtual void handleLight (Ray< T, U > &ray, const vec3< T > &intersectionPoint)=0

Detector< T, U > - int pixelWidth int pixelHeight

Eigen::Matrix< U, Eigen ::Dynamic, Eigen::Dynamic > pixelGrid

+ Detector(std::unique ptr< PlanarSurface< T, U > > surface, int

pixelWidth=512, int pixelHeight=512) + const Eigen::Matrix < U, Eigen::Dynamic, Eigen::Dynamic > & getPixel

+ void handleLight(Ray < T, U > &ray, const

vec3< T > &intersectionPoint) override + void resetPixelGrid()

Grid() const

std::pair< int, int

> mapToPixelGrid(const vec3< T > &intersectionPoint) const void adjustSurfaceToFitPixel

Grid()