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MeshRefractionMaterial



Diamond refraction

A convincing Glass/Diamond refraction material.

```
type MeshRefractionMaterialProps = ThreeElements['shaderMaterial'] &
  /** Environment map */
  envMap: THREE.CubeTexture | THREE.Texture
  /** Number of ray-cast bounces, it can be expensive to have too many
  bounces?: number
  /** Refraction index, 2.4 */
  ior?: number
  /** Fresnel (strip light), 0 */
  fresnel?: number
  /** RGB shift intensity, can be expensive, 0 */
  aberrationStrength?: number
  /** Color, white */
  color?: ReactThreeFiber.Color
  /** If this is on it uses fewer ray casts for the RGB shift sacrificing
  fastChroma?: boolean
}
```

If you want it to reflect other objects in the scene you best pair it with a cube-camera.

<CubeCamera>



```
{(texture) => (
  <mesh geometry={diamondGeometry} {...props}>
    <MeshRefractionMaterial envMap={texture} />
  </mesh>
)
</CubeCamera>
```

Otherwise just pass it an environment map.

```
const texture = useLoader(RGBELoader, "/textures/royal_esplanade_1k.h
return (
  <mesh geometry={diamondGeometry} {...props}>
    <MeshRefractionMaterial envMap={texture} />
```

[src/core/MeshRefractionMaterial.tsx](#)

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