

2D Optical Ray Tracer

Last revised: 2013-04-27

▶ General

▶ Drawing

▶ Named values

===== Settings =====

Settings :=

"left"	0
"right"	45
"order"	TRUE
"optics"	BLACK
"rays"	RED
	BLUE
	GREEN
	YELLOW
	MAGENTA
	ORANGE

Options "left", "right", "top" and "bottom" determine the field of view.
Set "order" to TRUE to order the optical elements according to horizontal position.
Option "optics" determines the color of the optical elements.
Option "rays" determines the colors of the light rays.

Allowed colors are BLACK, RED, BLUE, GREEN, YELLOW, MAGENTA, ORANGE.

▶ Tracing

▶ Setup

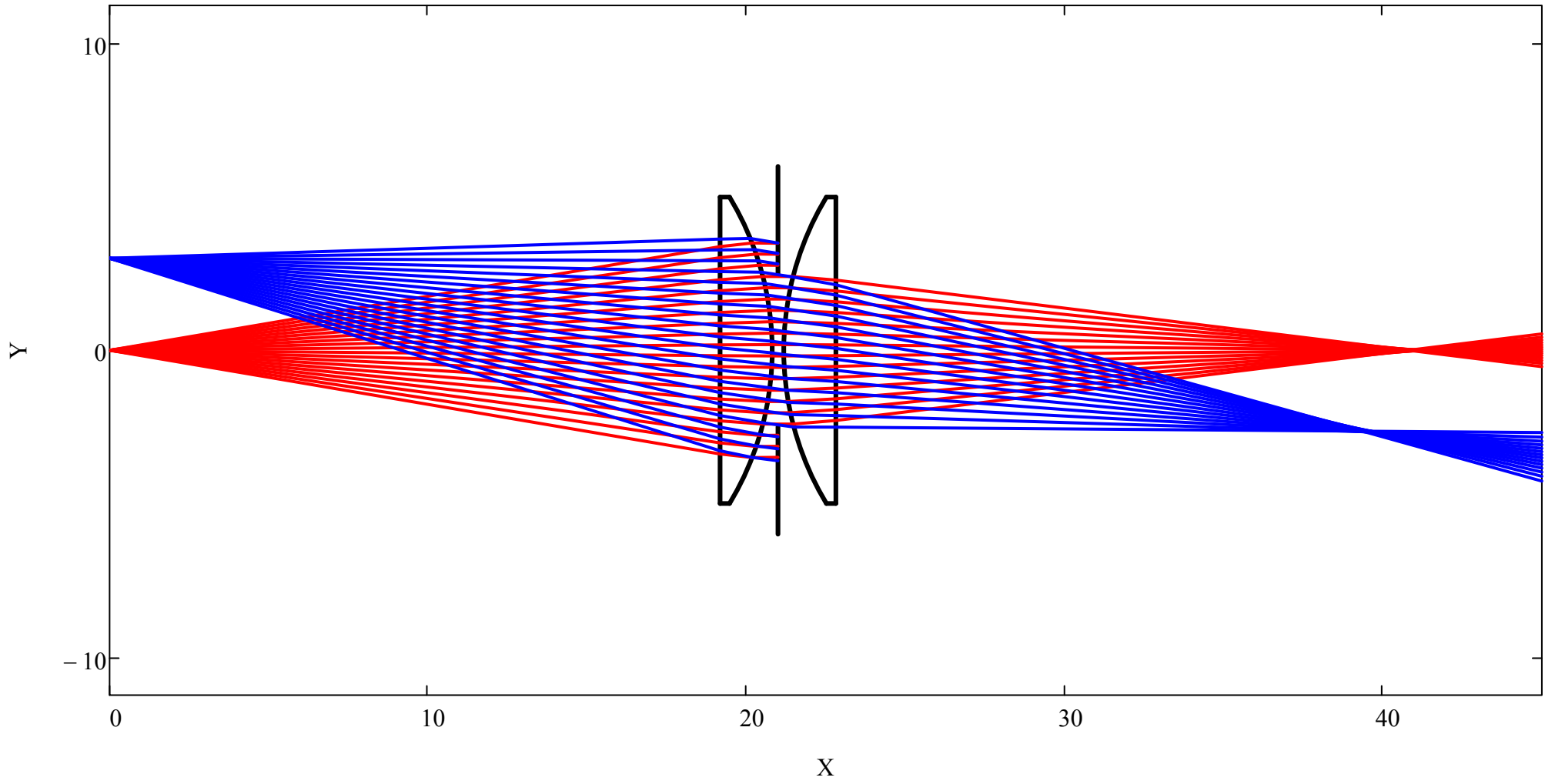
===== Optical system and light sources =====

The array "Elements" must contain the definitions of all optical elements comprising the optical system. See detailed [info](#).
 The array "Sources" must contain the definitions of all light sources. See detailed [info](#).

$$\text{Elements} := \left[\begin{array}{l} \left(\begin{array}{ll} \text{"type"} & \text{LENS} \\ \text{"x"} & 20 \\ \text{"f"} & 20 \\ \text{"diam"} & 10 \\ \text{"n"} & 1.5 \\ \text{"R1"} & \infty \end{array} \right) \left(\begin{array}{ll} \text{"type"} & \text{LENS} \\ \text{"x"} & 22 \\ \text{"f"} & 20 \\ \text{"diam"} & 10 \\ \text{"n"} & 1.5 \\ \text{"R2"} & \infty \end{array} \right) \left(\begin{array}{ll} \text{"type"} & \text{APERT} \\ \text{"x"} & 21 \\ \text{"apert"} & 5 \\ \text{"diam"} & 12 \end{array} \right) \end{array} \right] \quad \text{Sources} := \left[\begin{array}{l} \left(\begin{array}{ll} \text{"type"} & \text{POINT} \\ \text{"y"} & 3 \\ \text{"spread"} & 20 \cdot \text{deg} \\ \text{"dirx"} & 21 \\ \text{"diry"} & 0 \end{array} \right) \end{array} \right]$$

▶ Archive

▶ Processing



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 End of Program
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