

Tabla de conversión de parámetros de cuádrupolos

	Z	Y	H	H'	T	T'
Z	$\begin{matrix} z_{11} & z_{12} \\ z_{21} & z_{22} \end{matrix}$	$\begin{matrix} \frac{y_{22}}{\Delta_y} & \frac{-y_{12}}{\Delta_y} \\ -\frac{y_{21}}{\Delta_y} & \frac{y_{11}}{\Delta_y} \end{matrix}$	$\begin{matrix} \frac{\Delta_h}{h_{22}} & \frac{h_{12}}{h_{22}} \\ -\frac{h_{21}}{h_{22}} & \frac{1}{h_{22}} \end{matrix}$	$\begin{matrix} \frac{1}{h'_{11}} & \frac{-h'_{12}}{h'_{11}} \\ \frac{h'_{21}}{h'_{11}} & \frac{\Delta_{h'}}{h'_{11}} \end{matrix}$	$\begin{matrix} \frac{t_{11}}{t_{21}} & \frac{\Delta_t}{t_{21}} \\ \frac{1}{t_{21}} & \frac{t_{22}}{t_{21}} \end{matrix}$	$\begin{matrix} \frac{t'_{22}}{t'_{21}} & \frac{1}{t'_{21}} \\ \frac{\Delta_{t'}}{t'_{21}} & \frac{t'_{11}}{t'_{21}} \end{matrix}$
Y	$\begin{matrix} \frac{z_{22}}{\Delta_z} & \frac{-z_{12}}{\Delta_z} \\ -\frac{z_{21}}{\Delta_z} & \frac{z_{11}}{\Delta_z} \end{matrix}$	$\begin{matrix} y_{11} & y_{12} \\ y_{21} & y_{22} \end{matrix}$	$\begin{matrix} \frac{1}{h_{11}} & \frac{-h_{12}}{h_{11}} \\ \frac{h_{21}}{h_{11}} & \frac{\Delta_h}{h_{11}} \end{matrix}$	$\begin{matrix} \frac{\Delta_{h'}}{h'_{22}} & \frac{h'_{12}}{h'_{22}} \\ -\frac{h'_{21}}{h'_{22}} & \frac{1}{h'_{22}} \end{matrix}$	$\begin{matrix} \frac{t_{22}}{t_{12}} & \frac{-\Delta_t}{t_{12}} \\ -1 & \frac{t_{11}}{t_{12}} \end{matrix}$	$\begin{matrix} \frac{t'_{11}}{t'_{12}} & \frac{-1}{t'_{12}} \\ -\frac{\Delta_{t'}}{t'_{12}} & \frac{t'_{22}}{t'_{12}} \end{matrix}$
H	$\begin{matrix} \frac{\Delta_z}{z_{22}} & \frac{z_{12}}{z_{22}} \\ -\frac{z_{21}}{z_{22}} & \frac{1}{z_{22}} \end{matrix}$	$\begin{matrix} \frac{1}{y_{11}} & \frac{-y_{12}}{y_{11}} \\ \frac{y_{21}}{y_{11}} & \frac{\Delta_y}{y_{11}} \end{matrix}$	$\begin{matrix} h_{11} & h_{12} \\ h_{21} & h_{22} \end{matrix}$	$\begin{matrix} \frac{h'_{22}}{\Delta_{h'}} & \frac{h'_{12}}{\Delta_{h'}} \\ \frac{h'_{21}}{\Delta_{h'}} & \frac{h'_{11}}{\Delta_{h'}} \end{matrix}$	$\begin{matrix} \frac{t_{12}}{t_{22}} & \frac{\Delta_t}{t_{22}} \\ -1 & \frac{t_{21}}{t_{22}} \end{matrix}$	$\begin{matrix} \frac{t'_{12}}{t'_{11}} & \frac{1}{t'_{11}} \\ -\frac{\Delta_{t'}}{t'_{11}} & \frac{t'_{21}}{t'_{11}} \end{matrix}$
H'	$\begin{matrix} \frac{1}{z_{11}} & \frac{-z_{12}}{z_{11}} \\ \frac{z_{21}}{z_{11}} & \frac{\Delta_z}{z_{11}} \end{matrix}$	$\begin{matrix} \frac{\Delta_y}{y_{22}} & \frac{y_{12}}{y_{22}} \\ -\frac{y_{21}}{y_{22}} & \frac{1}{y_{22}} \end{matrix}$	$\begin{matrix} \frac{h_{22}}{\Delta_h} & \frac{-h_{12}}{\Delta_h} \\ -\frac{h_{21}}{\Delta_h} & \frac{h_{11}}{\Delta_h} \end{matrix}$	$\begin{matrix} h'_{11} & h'_{12} \\ h'_{21} & h'_{22} \end{matrix}$	$\begin{matrix} \frac{t_{21}}{t_{11}} & \frac{-\Delta_t}{t_{11}} \\ \frac{1}{t_{11}} & \frac{t_{12}}{t_{11}} \end{matrix}$	$\begin{matrix} \frac{t'_{21}}{t'_{22}} & \frac{-1}{t'_{22}} \\ -\frac{\Delta_{t'}}{t'_{22}} & \frac{t'_{12}}{t'_{22}} \end{matrix}$
T	$\begin{matrix} \frac{z_{11}}{z_{21}} & \frac{\Delta_z}{z_{21}} \\ \frac{1}{z_{21}} & \frac{z_{22}}{z_{21}} \end{matrix}$	$\begin{matrix} \frac{-y_{22}}{y_{21}} & \frac{-1}{y_{21}} \\ -\frac{\Delta_y}{y_{21}} & \frac{-y_{11}}{y_{21}} \end{matrix}$	$\begin{matrix} \frac{-\Delta_h}{h_{21}} & \frac{-h_{11}}{h_{21}} \\ -\frac{h_{22}}{h_{21}} & \frac{-1}{h_{21}} \end{matrix}$	$\begin{matrix} \frac{1}{h'_{21}} & \frac{-h'_{22}}{h'_{21}} \\ \frac{h'_{11}}{h'_{21}} & \frac{\Delta_{h'}}{h'_{21}} \end{matrix}$	$\begin{matrix} t_{11} & t_{12} \\ t_{21} & t_{22} \end{matrix}$	$\begin{matrix} \frac{t'_{22}}{\Delta_{t'}} & \frac{t'_{12}}{\Delta_{t'}} \\ \frac{t'_{21}}{\Delta_{t'}} & \frac{t'_{11}}{\Delta_{t'}} \end{matrix}$
T'	$\begin{matrix} \frac{z_{22}}{z_{12}} & \frac{\Delta_z}{z_{12}} \\ \frac{1}{z_{12}} & \frac{z_{11}}{z_{12}} \end{matrix}$	$\begin{matrix} \frac{-y_{11}}{y_{12}} & \frac{-1}{y_{12}} \\ -\frac{\Delta_y}{y_{12}} & \frac{-y_{22}}{y_{12}} \end{matrix}$	$\begin{matrix} \frac{1}{h_{12}} & \frac{h_{11}}{h_{12}} \\ \frac{h_{22}}{h_{12}} & \frac{\Delta_h}{h_{12}} \end{matrix}$	$\begin{matrix} \frac{-\Delta_{h'}}{h'_{12}} & \frac{-h'_{22}}{h'_{12}} \\ -\frac{h'_{11}}{h'_{12}} & \frac{-1}{h'_{12}} \end{matrix}$	$\begin{matrix} \frac{t_{22}}{\Delta_t} & \frac{t_{12}}{\Delta_t} \\ \frac{t_{21}}{\Delta_t} & \frac{t_{11}}{\Delta_t} \end{matrix}$	$\begin{matrix} t'_{11} & t'_{12} \\ t'_{21} & t'_{22} \end{matrix}$

Nota:

$$\Delta_z = \det(Z) \quad \Delta_y = \det(Y) \quad \Delta_h = \det(H)$$

$$\Delta_{h'} = \det(H') \quad \Delta_t = \det(T) \quad \Delta_{t'} = \det(T')$$