

$$\begin{aligned}
p_{x2} &= \exp(a)p_{x1} \, , \\
p_{y2} &= \exp(-a)p_{y1} \, , \\
x_2 &= \exp(-a)x_1 + bp_{x1} \, , \\
y_2 &= \exp(a)y_1 - bp_{y1} \, , \\
z_2 &= z_1 + (ax_1 - b(1 - a/2)p_{x2})p_{x1} - (ay_1 - b(1 + a/2)p_{y2})p_{y1} \, ,
\end{aligned}$$

where

$$\begin{aligned}
a &= -\text{K1F1} \frac{|\text{F1}|}{24p_1\text{L}} \, , \\
b &= \frac{\text{K1F2}}{\text{L}} \, .
\end{aligned}$$