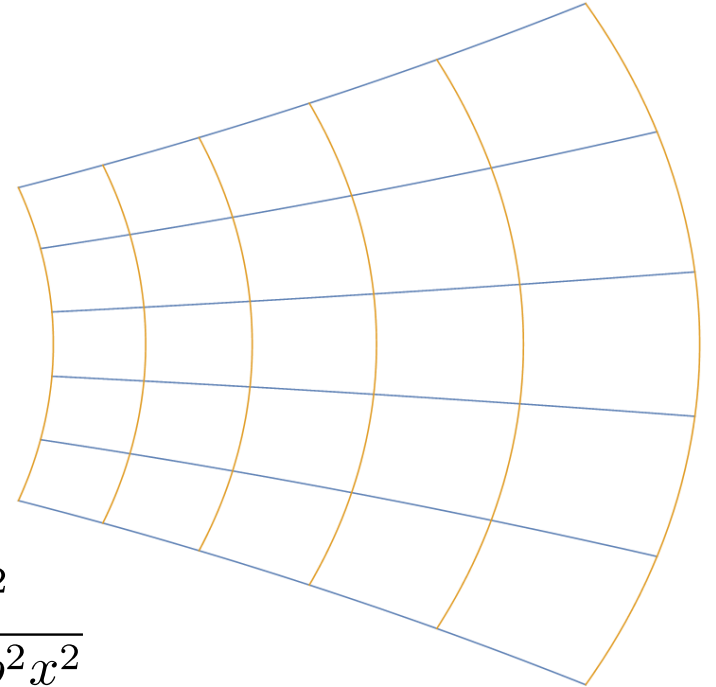
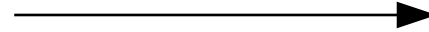
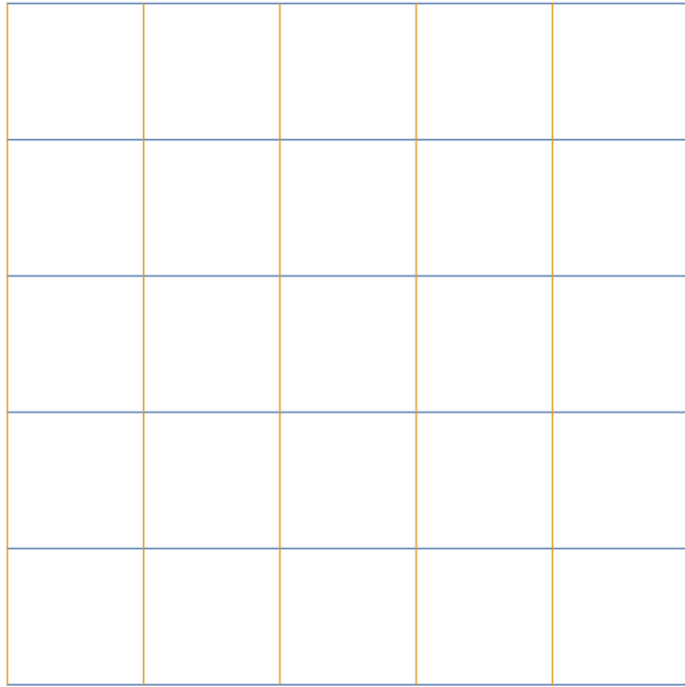


# Special conformal transformations in the xy-plane

CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>

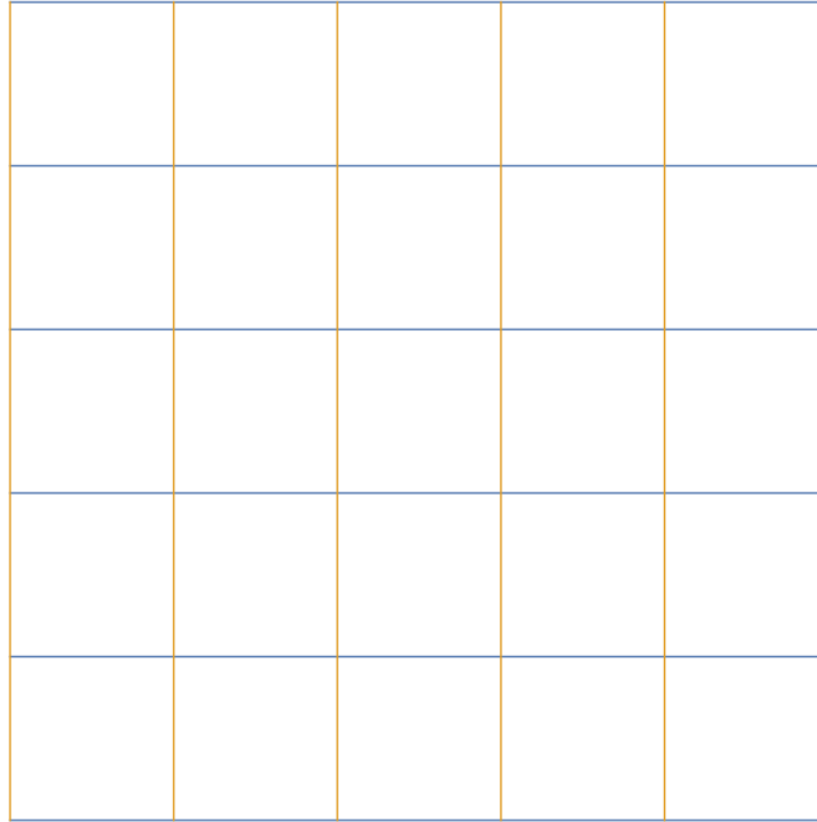


$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

Special conformal transformations are parametrized by a vector  $b^{\mu}$ . In the above, the coordinate lines for  $x$  and  $y$  are shown before and after a special conformal transformation with  $b^{\mu} = (0.2, 0)$ .

# Special conformal transformations in the xy-plane ( $b_x=0.00$ , $b_y=0.00$ )

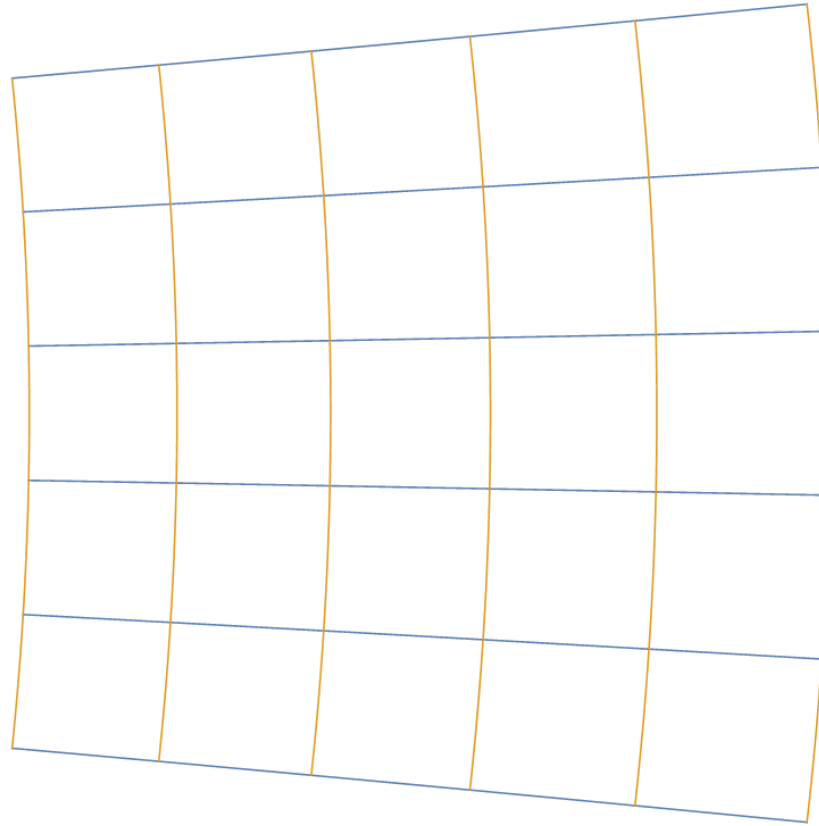
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane ( $b_x=0.05$ , $b_y=0.00$ )

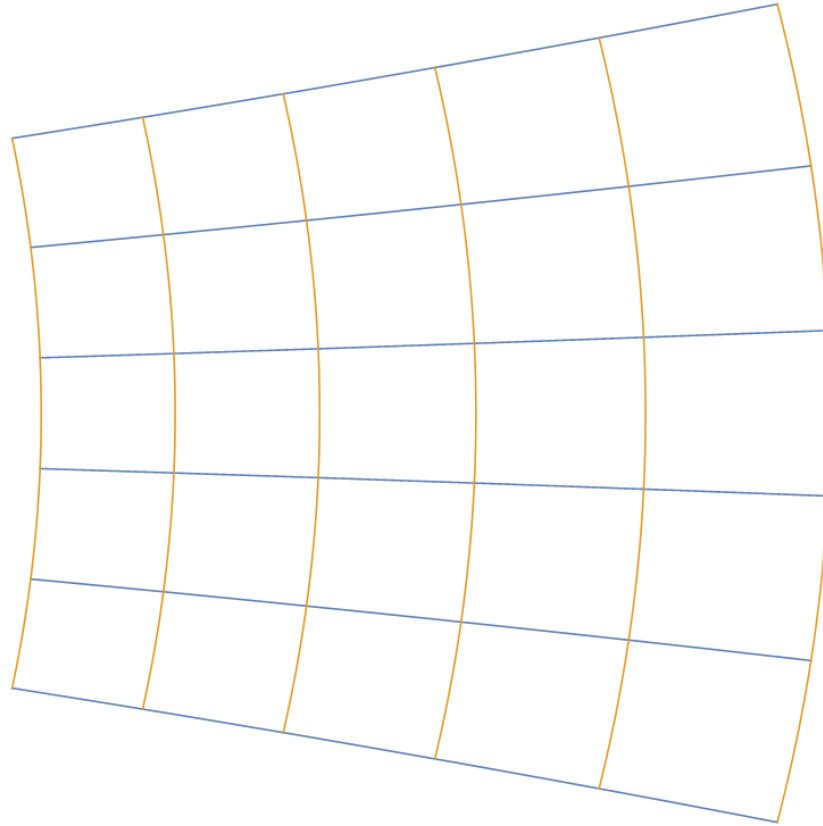
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.10, by=0.00)

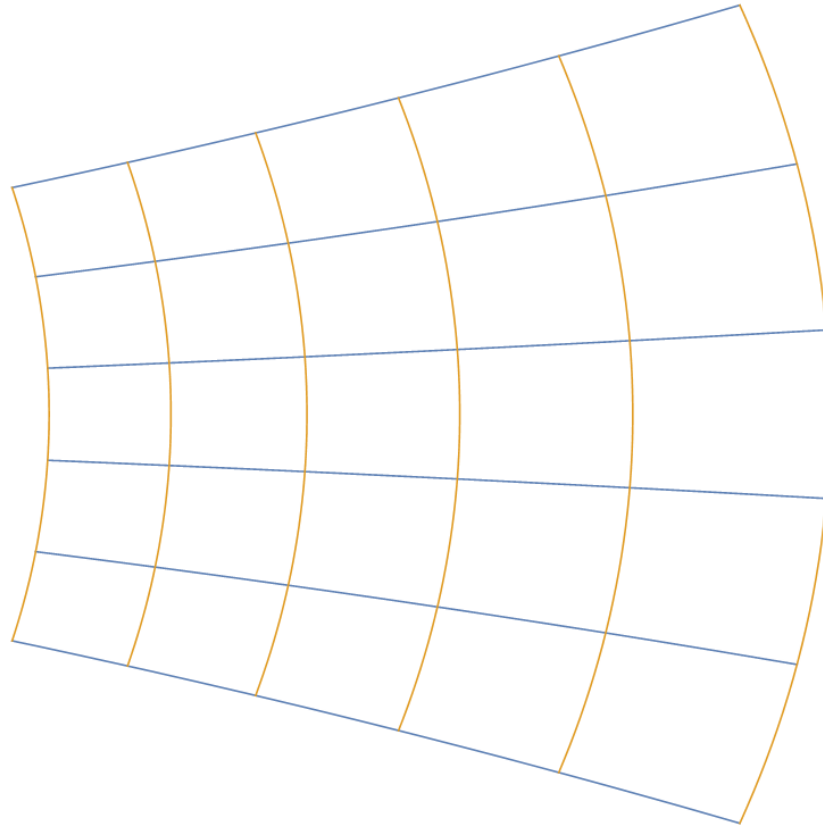
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the $xy$ -plane ( $b_x=0.15$ , $b_y=0.00$ )

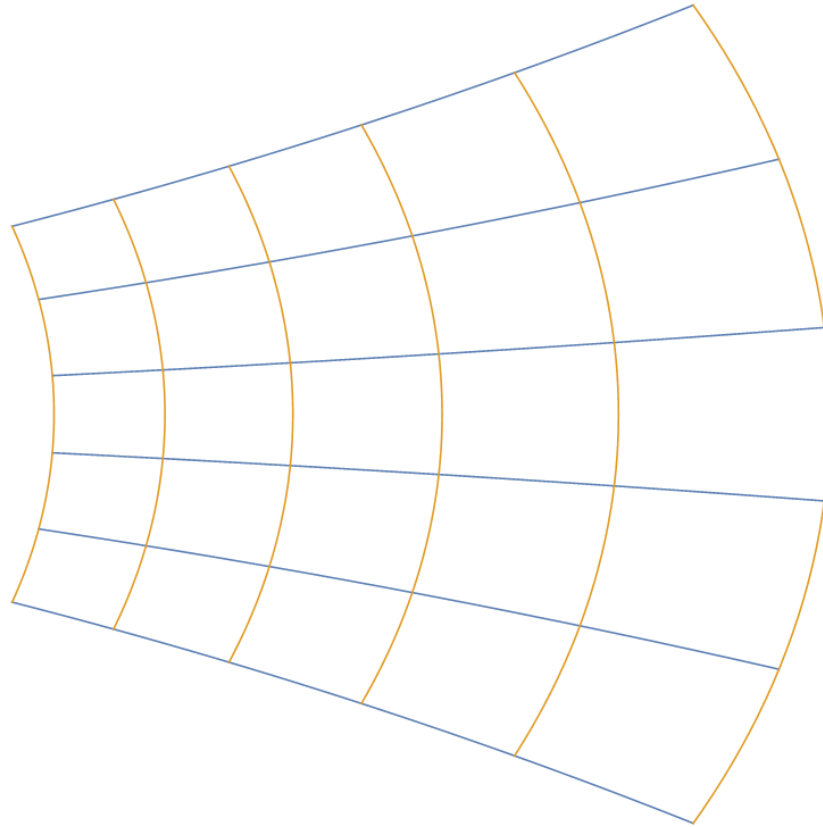
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the $xy$ -plane ( $b_x=0.20$ , $b_y=0.00$ )

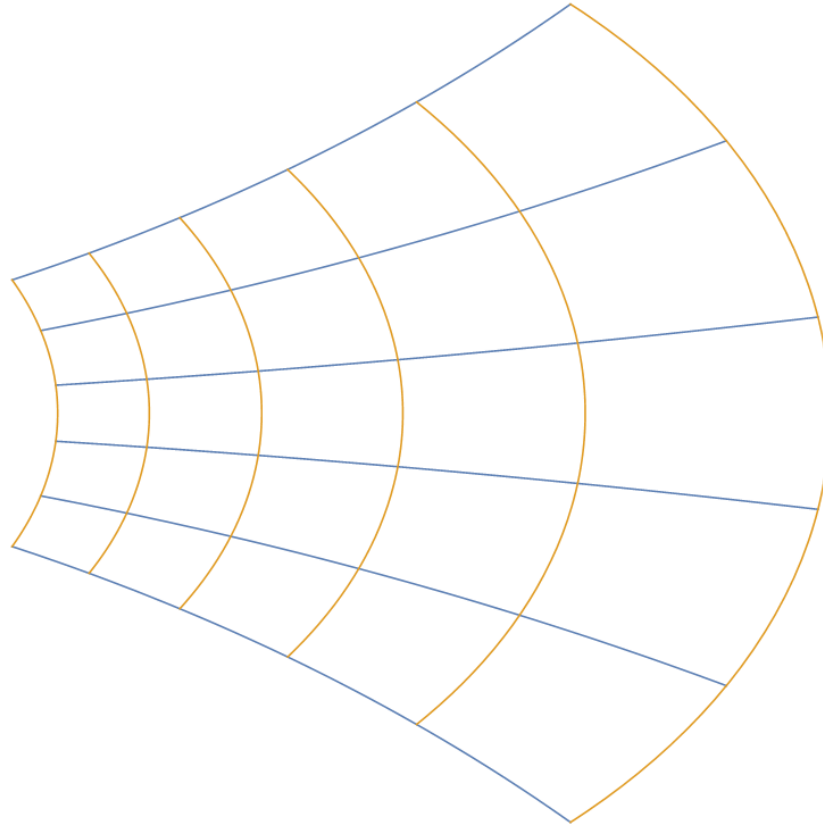
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.30, by=0.00)

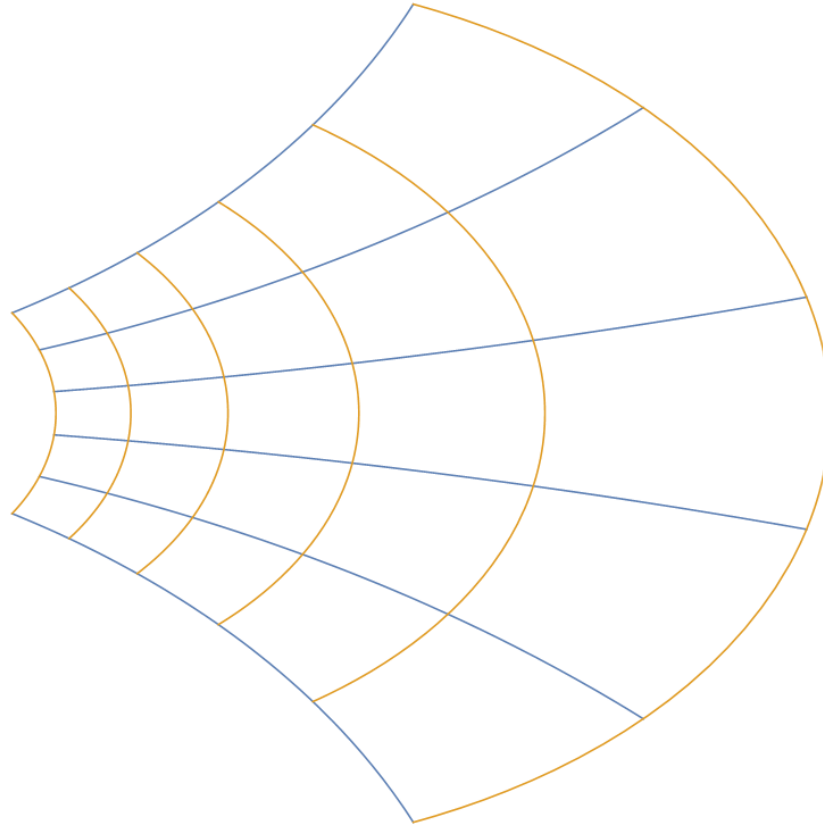
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.40, by=0.00)

CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>

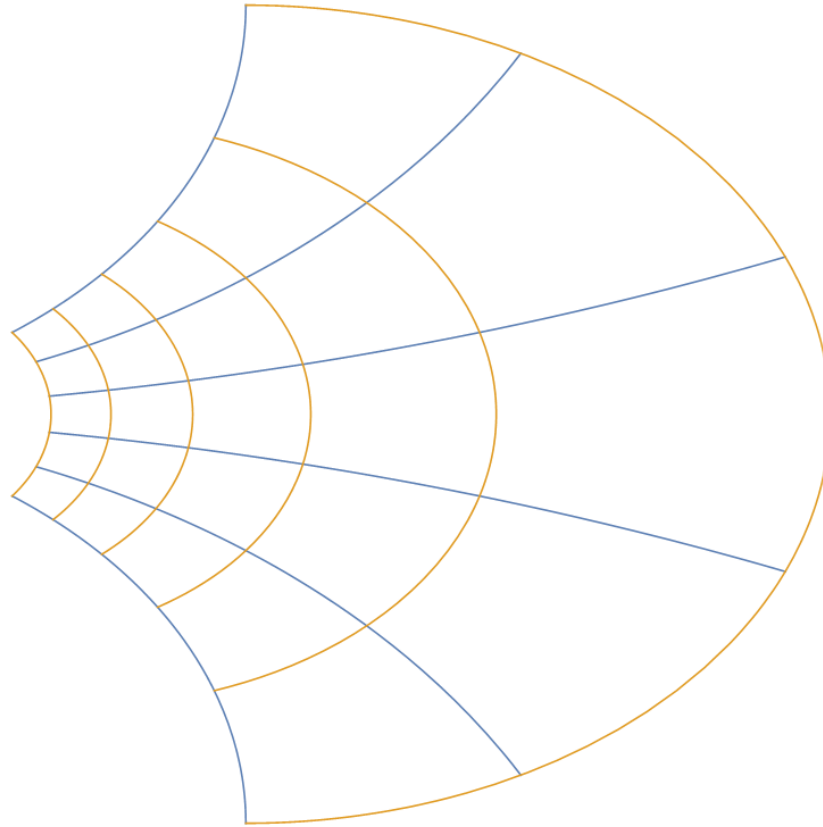


$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$



# Special conformal transformations in the xy-plane (bx=0.50, by=0.00)

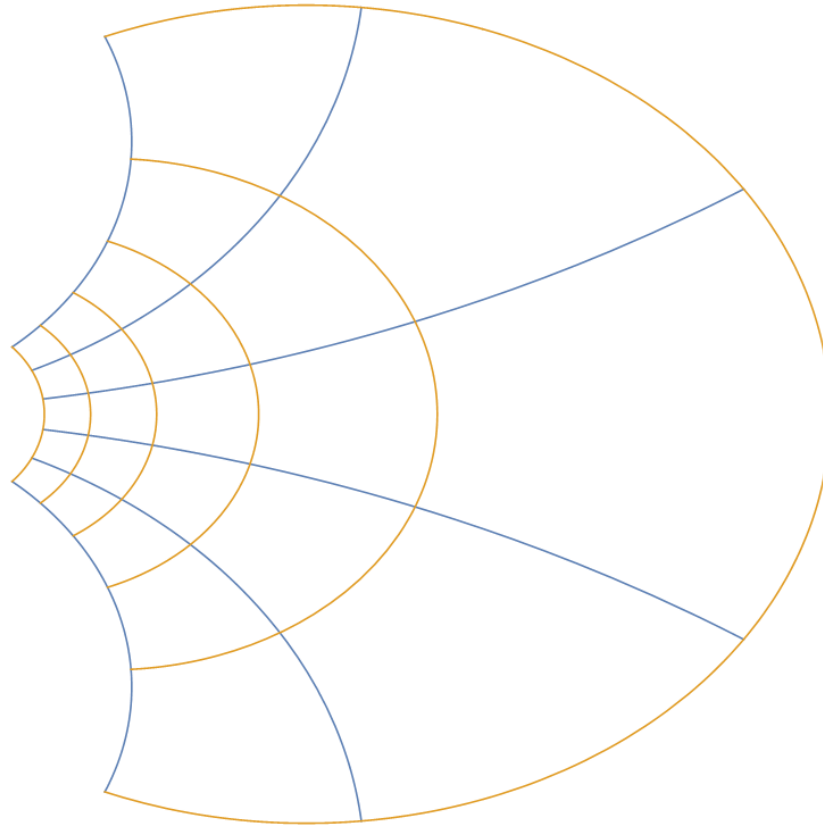
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.60, by=0.00)

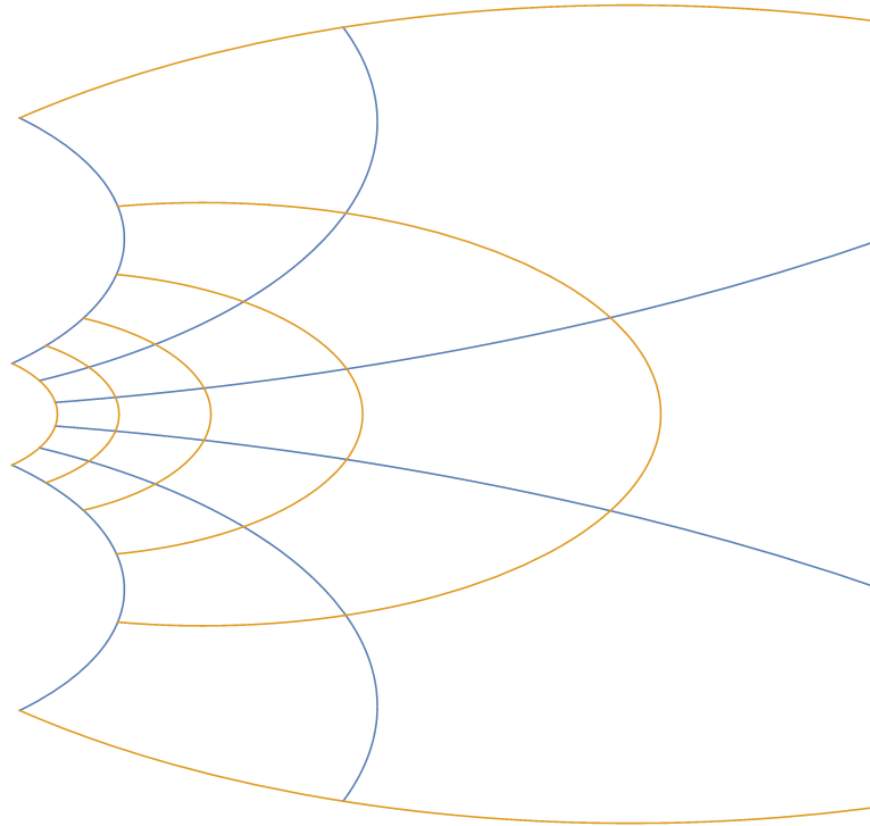
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.70, by=0.00)

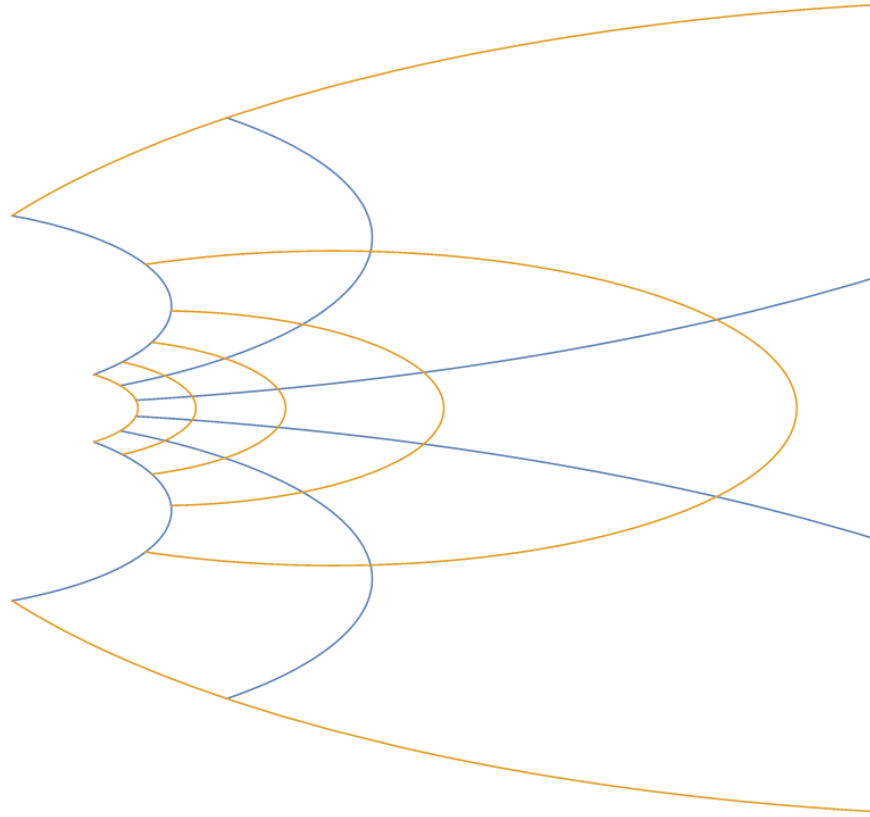
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.80, by=0.00)

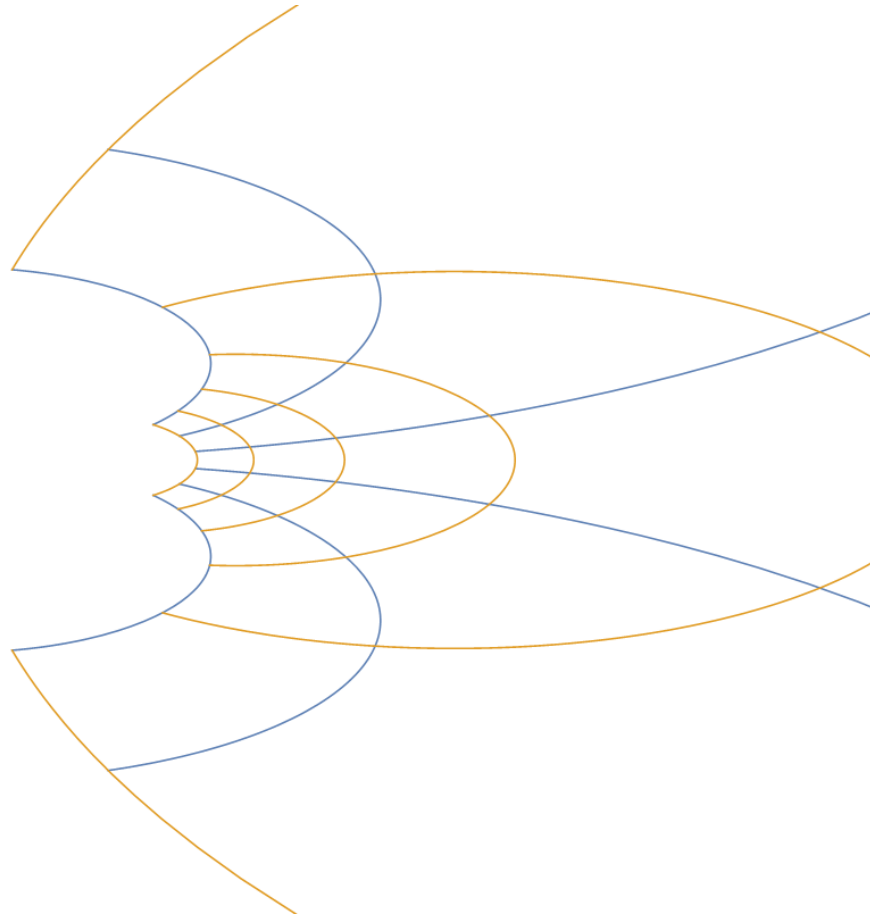
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.90, by=0.00)

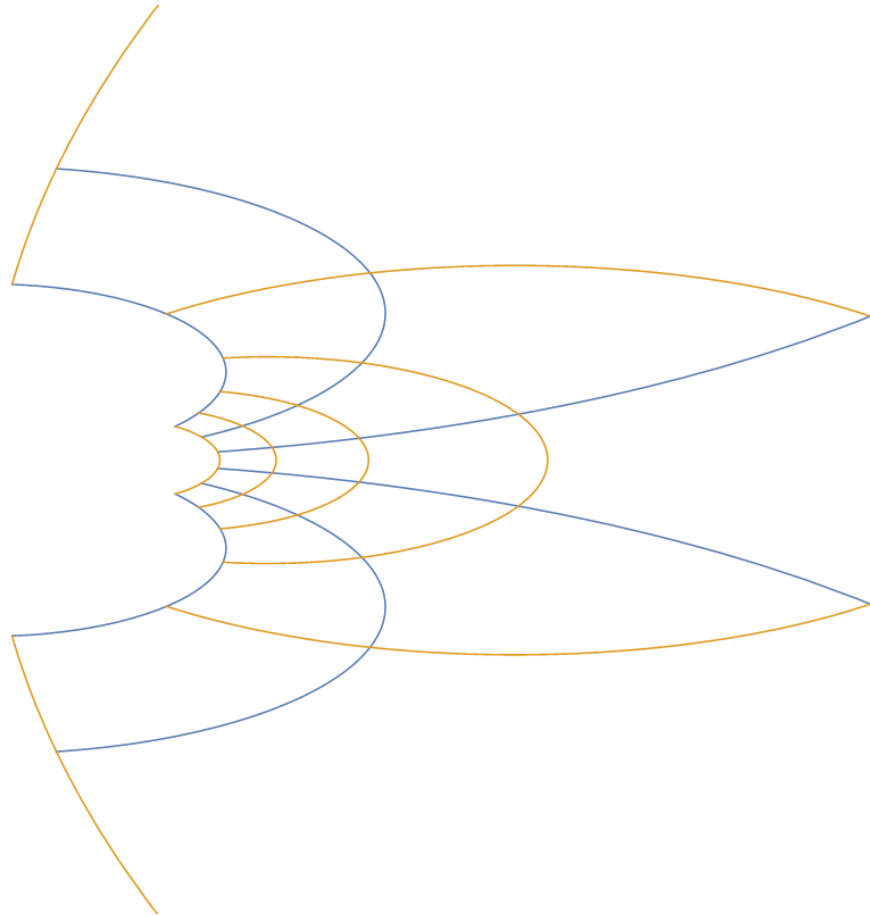
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=0.95, by=0.00)

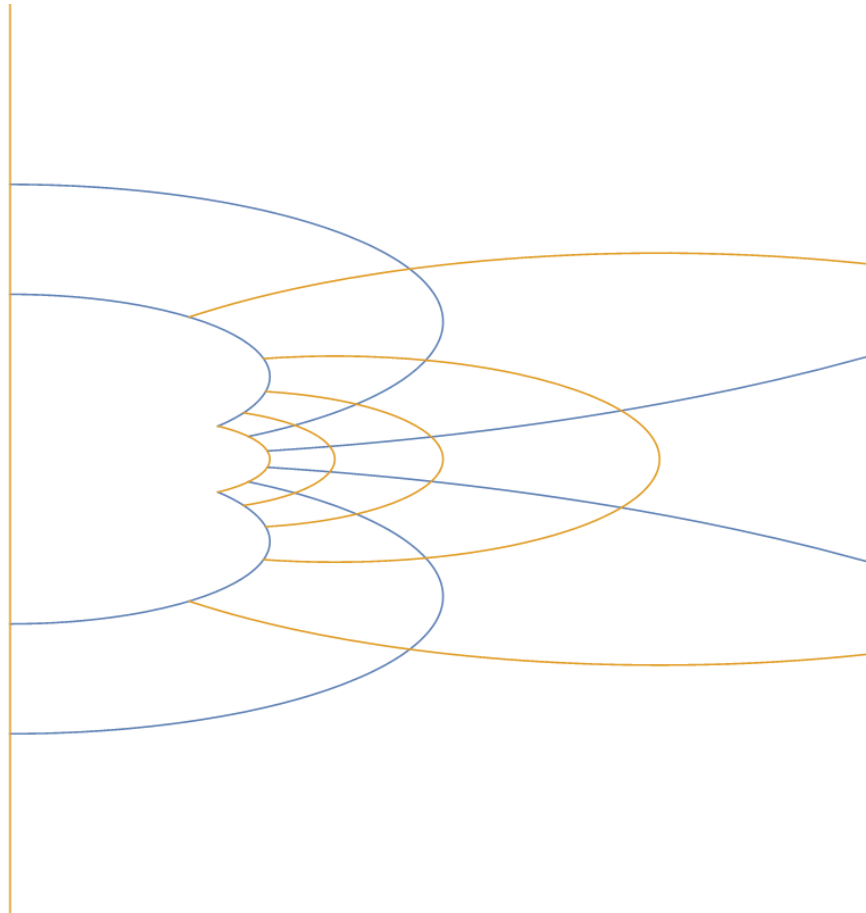
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the $xy$ -plane ( $b_x=1.00$ , $b_y=0.00$ )

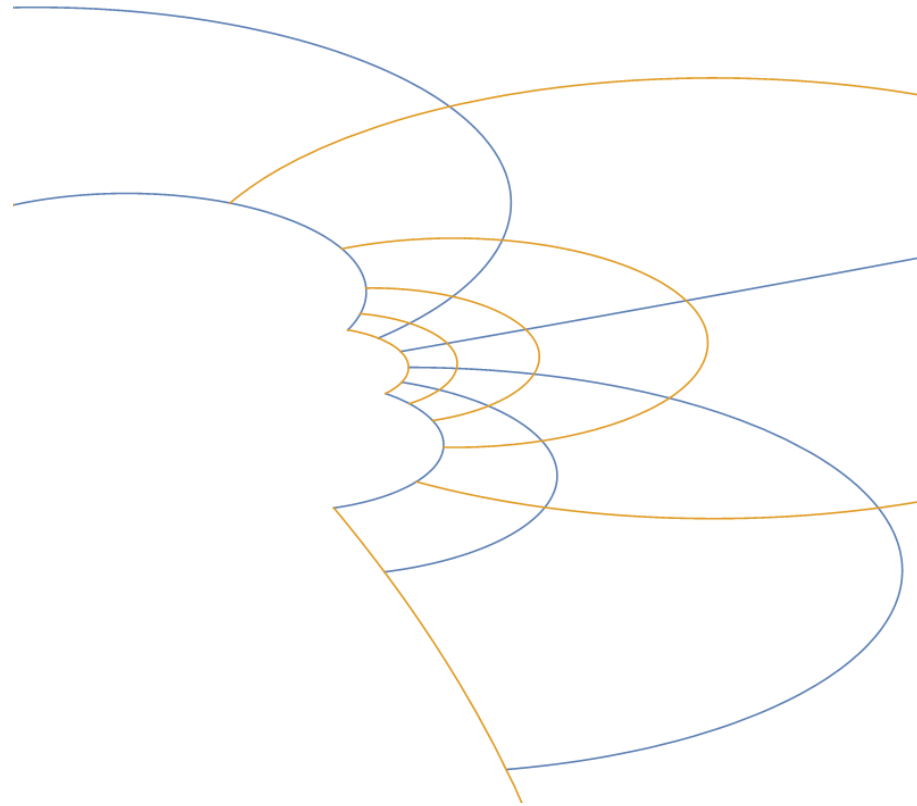
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=0.20)

CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>

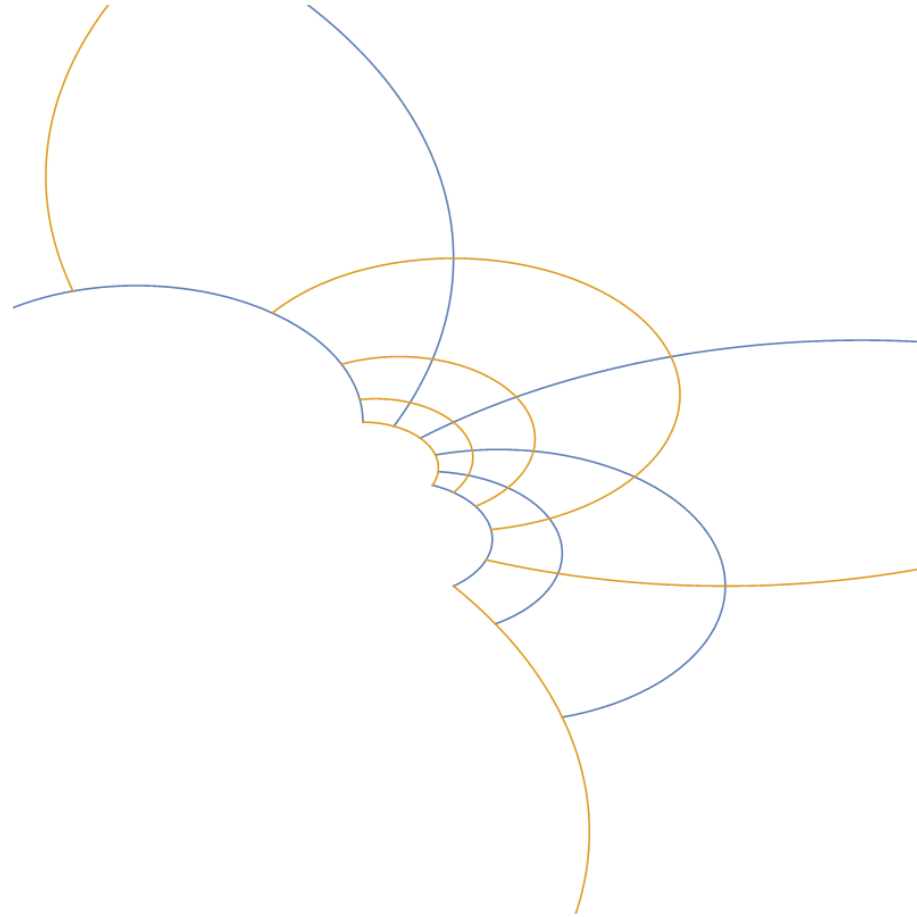


$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$



# Special conformal transformations in the $xy$ -plane ( $b_x=1.00$ , $b_y=0.50$ )

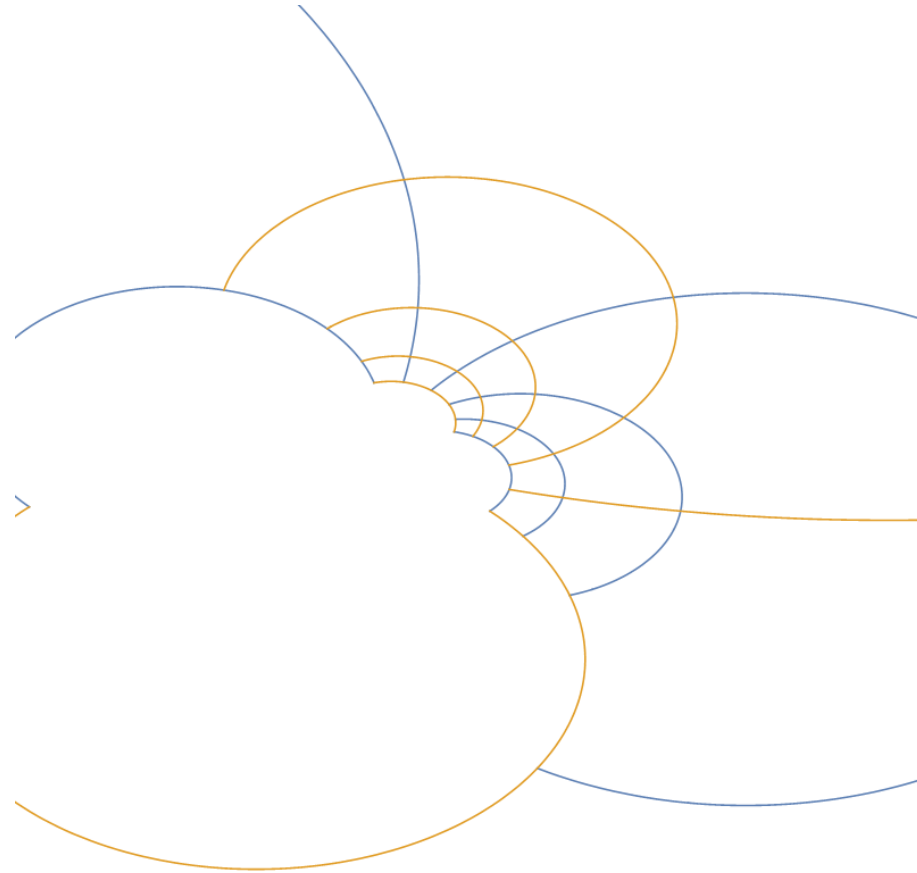
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=0.70)

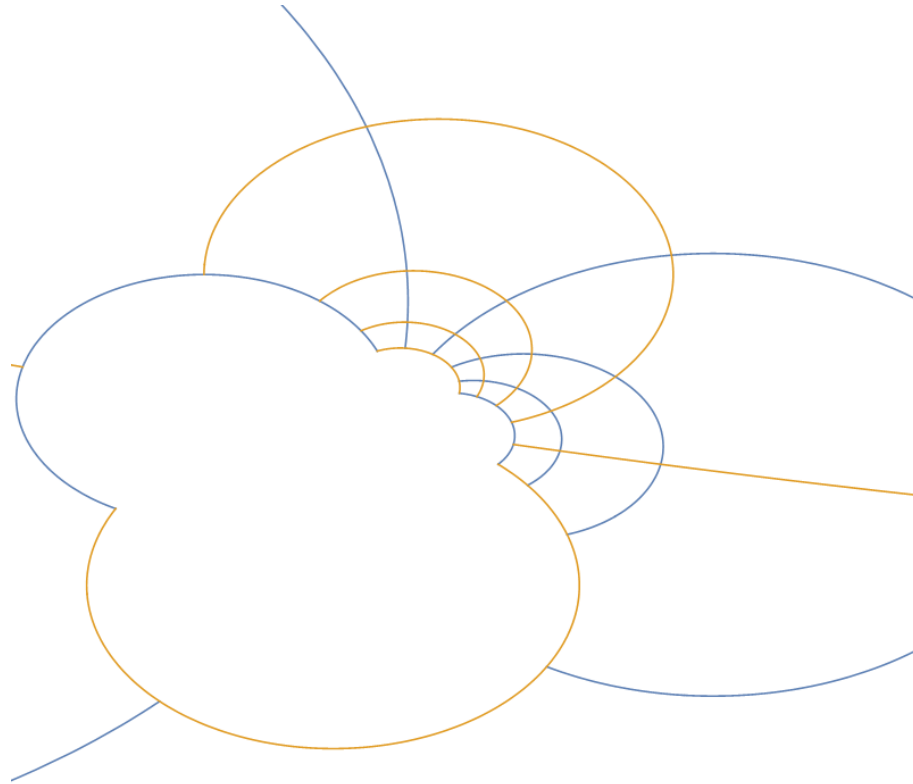
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=0.80)

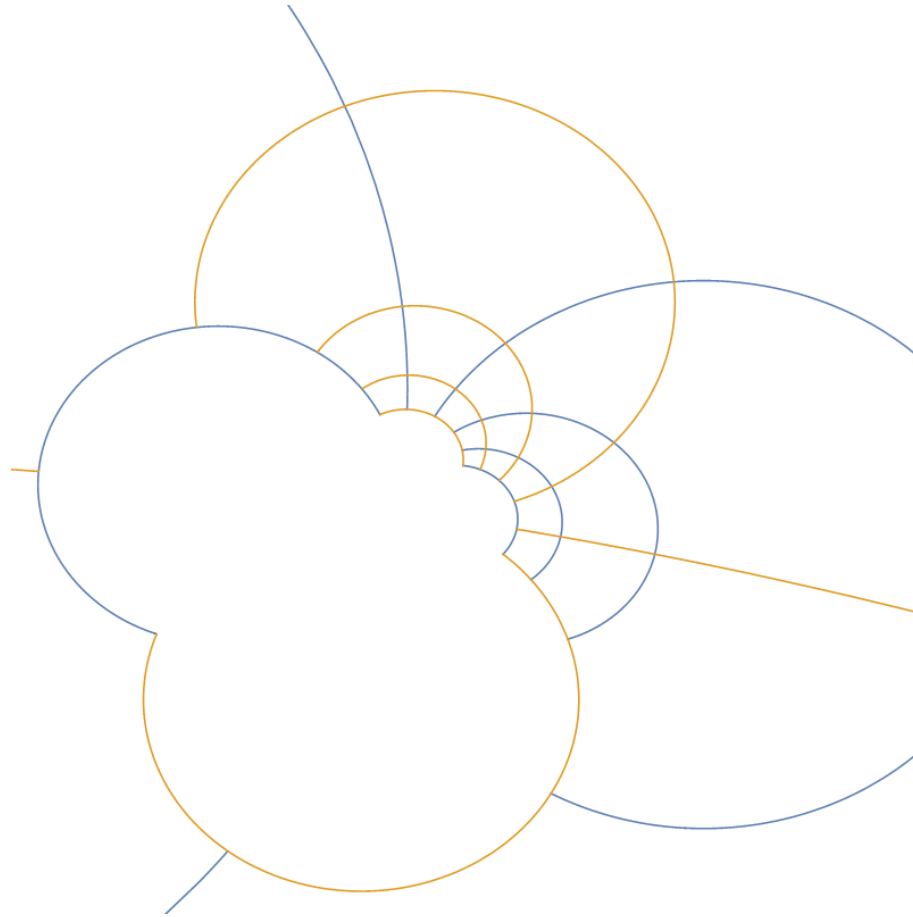
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=0.85)

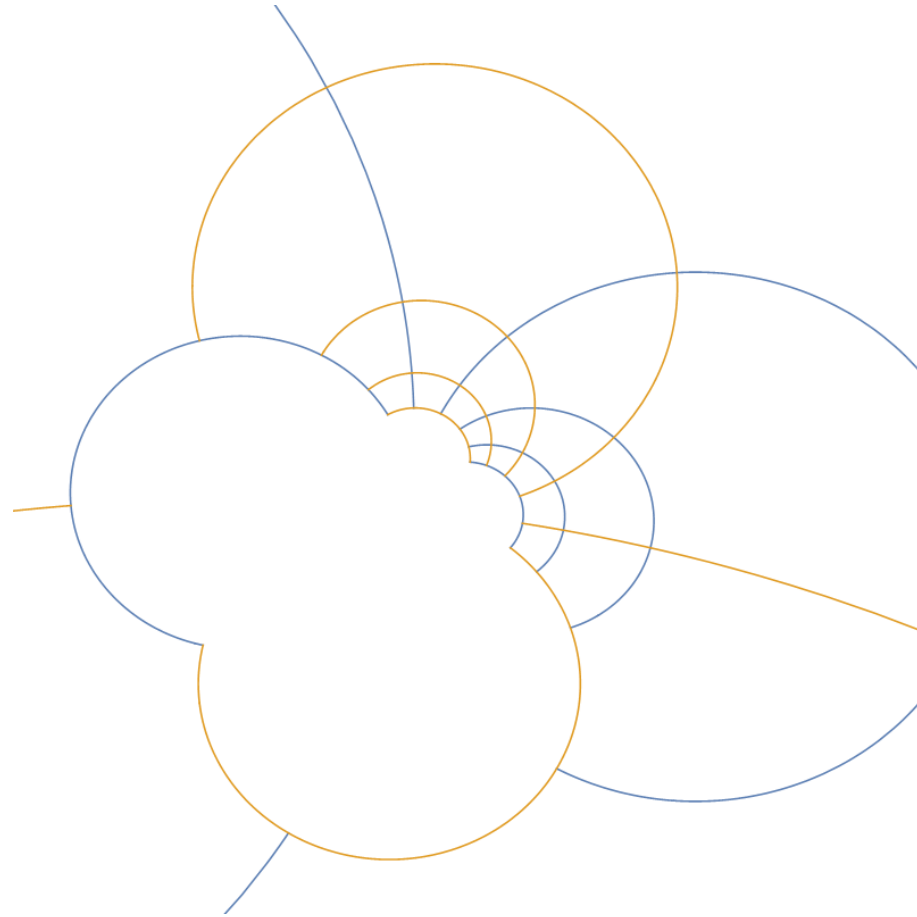
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=0.90)

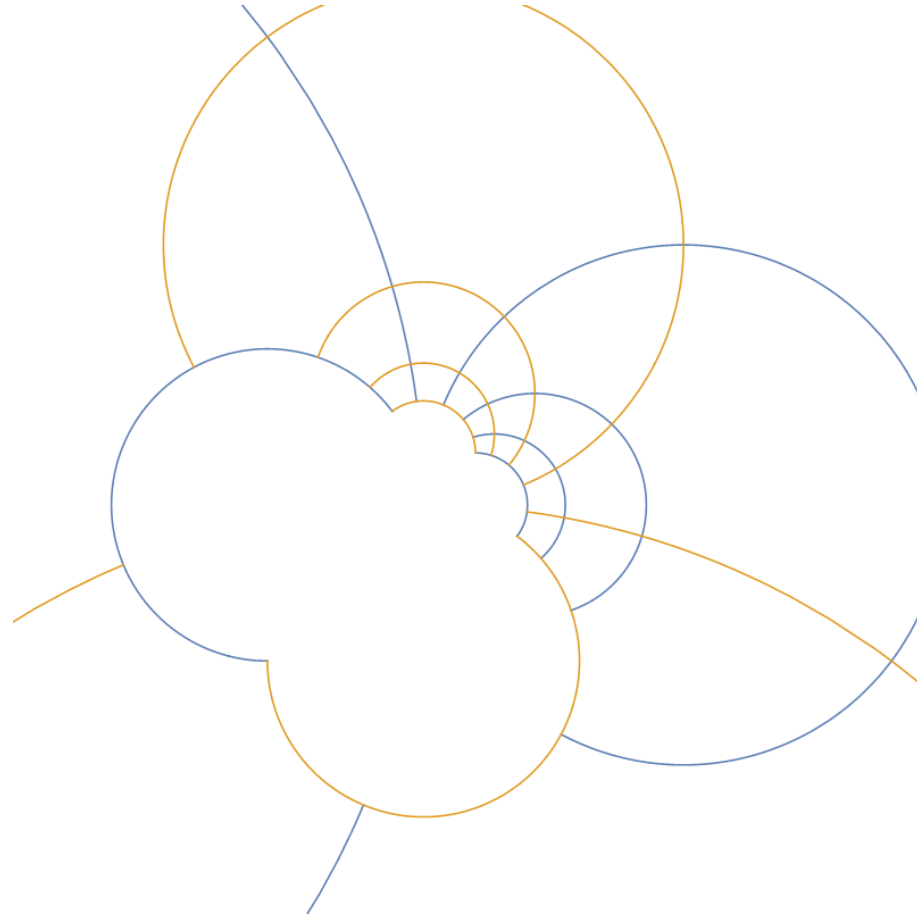
CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$

# Special conformal transformations in the xy-plane (bx=1.00, by=1.00)

CFT Student meetings, <http://www.spintwo.net/Courses/CFT-Student-Meetings/>



$$x'^{\mu} = \frac{x^{\mu} - b^{\mu} x^2}{1 - 2b \cdot x + b^2 x^2}$$