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Coordinates

A B C

(0,0)

(0,0)

(0,-1)

(0,-2)

(1,1)

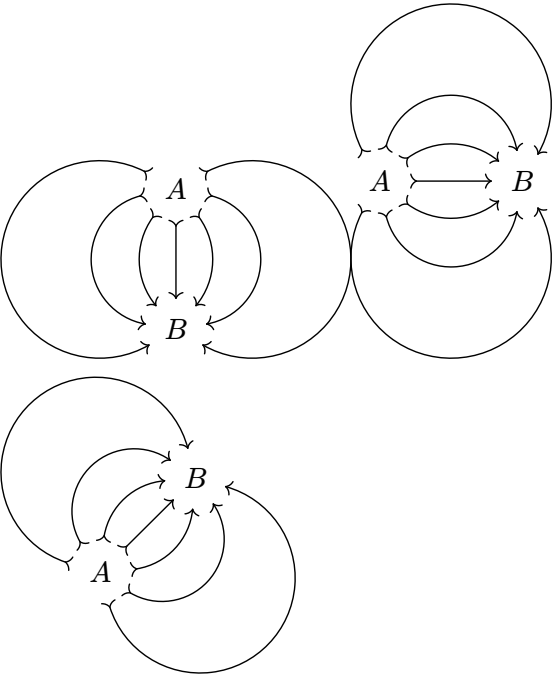
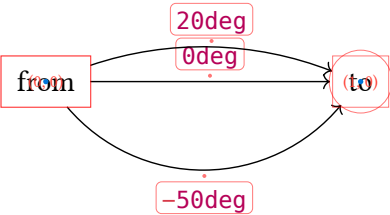
X
Y
Z

(1,0)

(1,0)

(1,-2)

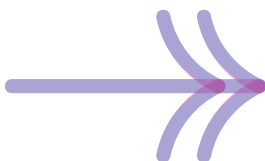
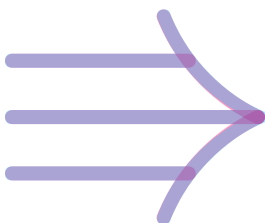
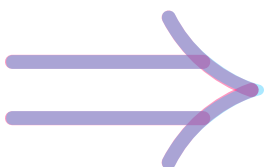
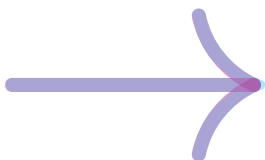
Arc edges



Matching math arrows

Compare to \rightarrow , \Rightarrow , \implies , \twoheadrightarrow , \hookrightarrow , \mapsto .

Our output versus reference symbol in default math font.




Double and triple lines


Diagram $A \xrightarrow{f} B$ and equation $A \rightarrow B$.


Diagram $A \xRightarrow{f} B$ and equation $A \Rightarrow B$.


Diagram $A \xRightarrow{\!\!\!f} B$ and equation $A \Rrightarrow B$.


Arrow head shorthands


"->" = 


"<-" = 


">-<" = 


"<->" = 


"<=>" = 


"<==>" = 


"|->" = 


"|=>" = 


">->" = 


"<<->>" = 


">>-<<" = 


">>>-}>" = 


"hook->" = 


"hook' - - hook" = 


"|=|" = 


"|||-||" = 


"||| - |||" = 


"/- - \\" = 


"\\ = \\" = 

"/=/" = 


"x-X" = 


">>-<<" = 


"harpoon-harpoon'" = 


"harpoon' -<<" = 


"<- - hook'" = 

"|. . |" = 

"hooks - - hooks" = 

"o-0" = 

"0-o" = 

"*-@" = 

"o==0" = 

"||->>" = 

"<| - |>" = 

































"|>-<|" = 

"-|- " = 

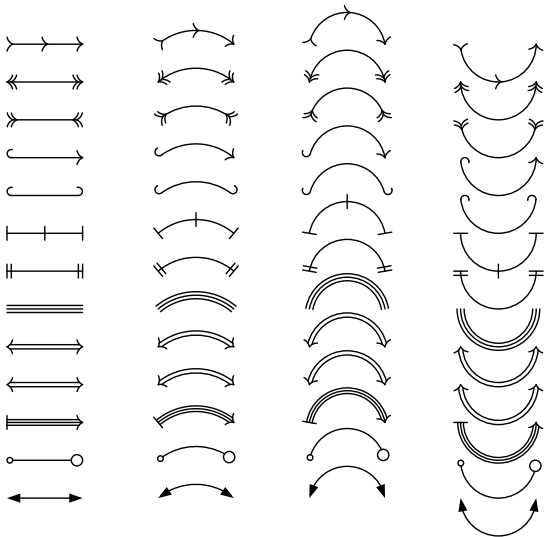
"hook-/->" = 

"<{-}>" = 

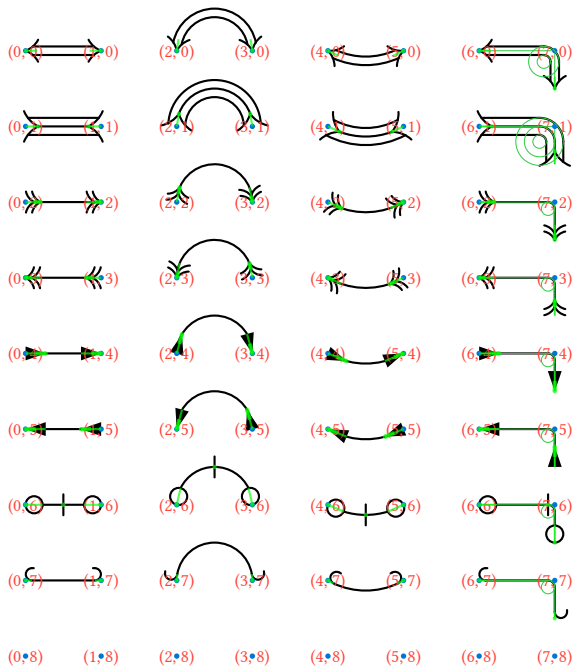
Symbol arrow aliases

Math	Unicode	Mark	Diagram
\rightarrow	\rightarrow	->	
\longrightarrow		->	
\leftarrow	\leftarrow	<-	
\leftrightarrow	\leftrightarrow	<->	
\longleftrightarrow		<->	
\Rightarrow		->>	
\Leftarrow		<<-	
\rightharpoonup		>->	
\leftharpoonup		<-<	
\Rightarrow	\Rightarrow	=>	
\Longrightarrow		=>	
\Leftarrow		<=	
\Leftrightarrow	\Leftrightarrow	<=>	
\Leftrightarrow		<=>	
\mapsto	\mapsto	->	
\mapsto		=>	
\rightsquigarrow		~>	
\leftrightsquigarrow		<~	
\hookrightarrow		hook->	
\hookleftarrow		<-hook'	

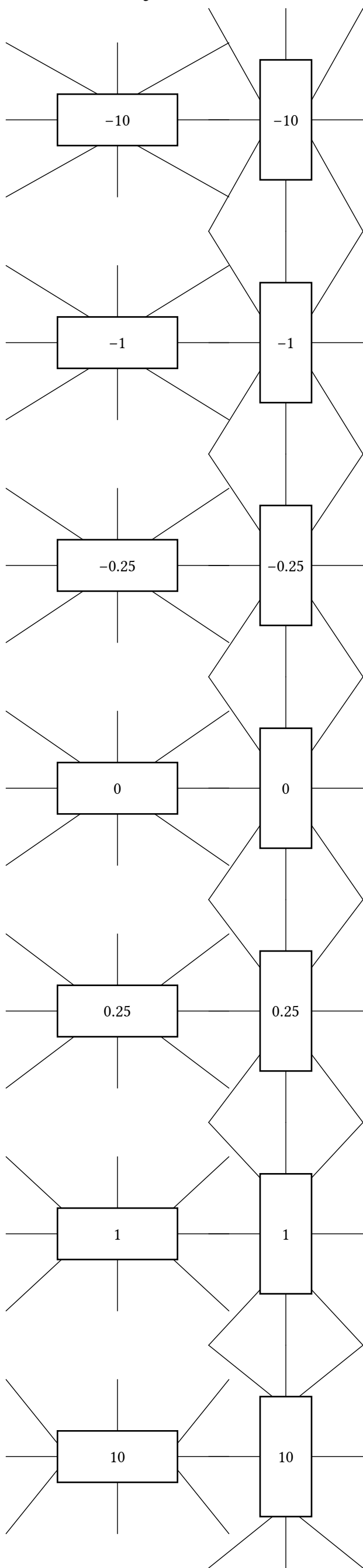
Bending arrows



Fine mark angle corrections



Defocus adjustment




Label side


left 

\center>


right

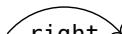
left


-center>


right

left


\center<


right

left 

left 

left 



center




center



center

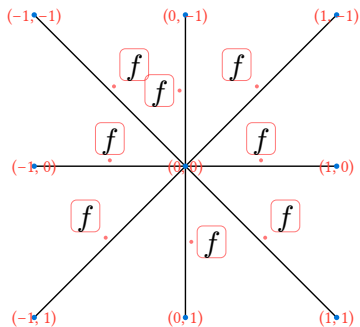


right


right

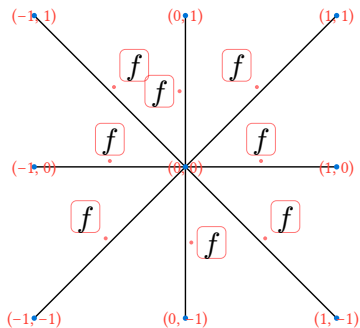

right

Automatic label placement

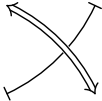
Default placement above the line.



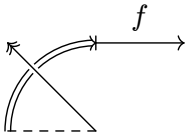
Reversed y -axis:



Crossing connectors



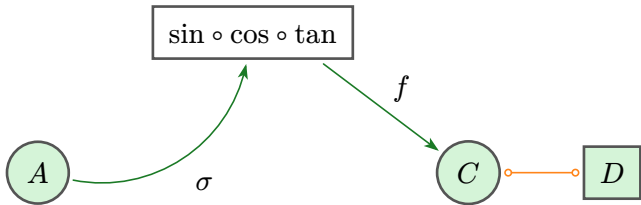
edge() argument shorthands



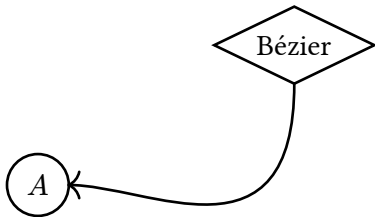
edge () stroke



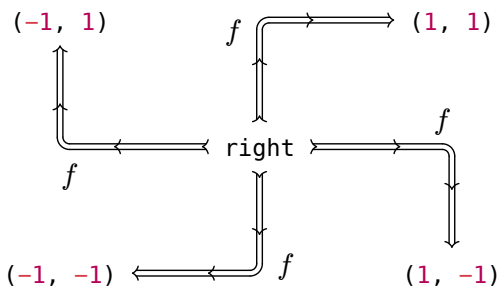
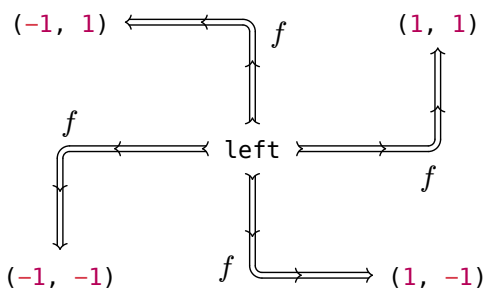
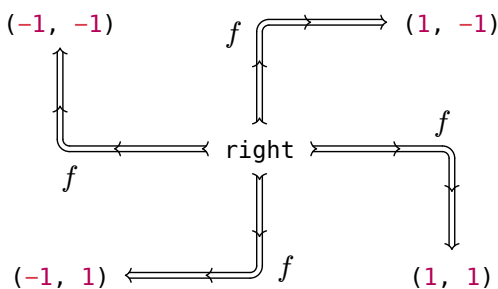
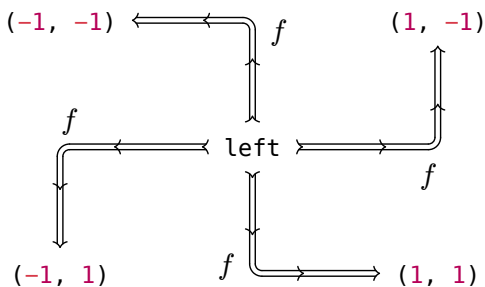
Diagram-level options



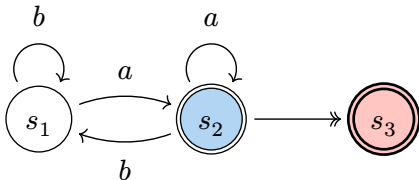
CeTZ integration



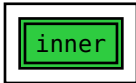
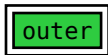
Corner edges



Double node strokes

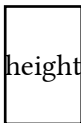
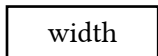
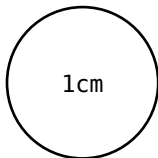
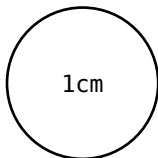


Relative and absolute extrusion lengths



Custom node sizes

Make sure provided dimensions are exact, not affected by node inset.



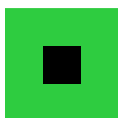
both

Node inset and outset

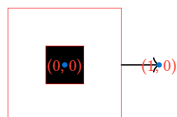
What 5mm inset should look like:



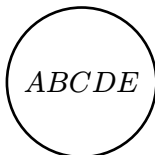
A diagram node with 5mm inset:



A diagram node with 5mm outset:



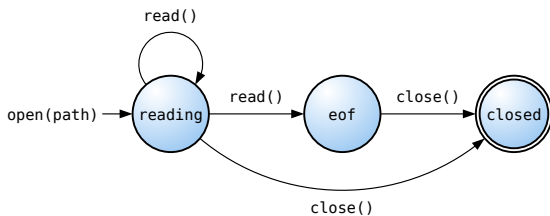
Circular insets:



Example

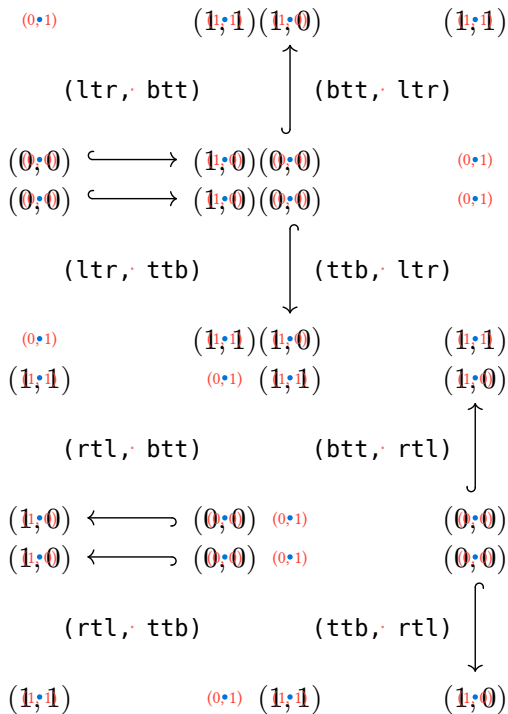
Make sure node or edge labels don't pick up equation numbers!

$$a^2 \quad (1)$$

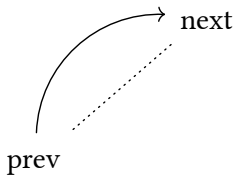
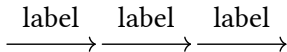


$$b^2 \quad (2)$$

Axes configuration



Implicit from and to points



Edge positional arguments

Explicit named arguments versus implicit positional arguments.

Each row should be the same thing repeated.

$$\begin{array}{lll} A \longrightarrow B & A \longrightarrow B & A \longrightarrow B \\ A \xrightarrow{\pi} B & A \xrightarrow{\pi} B & A \xrightarrow{\pi} B \\ A \xrightarrow{\tau} B & A \xrightarrow{\tau} B & A \xrightarrow{\tau} B \\ A \xrightarrow{+} B & A \xrightarrow{+} B & A \xrightarrow{+} B \end{array}$$

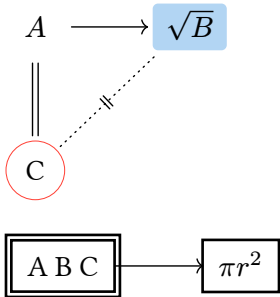
Math-mode diagrams

The following diagrams should be identical:

$$\begin{array}{ccc} G & \xrightarrow{f} & \operatorname{im}(f) \\ \pi \downarrow & \nearrow \tilde{f} & \\ G/\ker(f) & & \end{array}$$

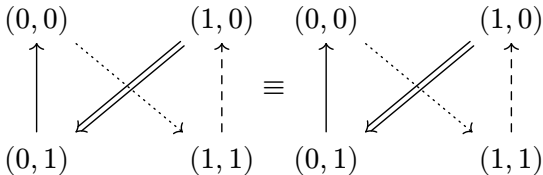
$$\begin{array}{ccc} G & \xrightarrow{f} & \operatorname{im}(f) \\ \pi \downarrow & \nearrow \tilde{f} & \\ G/\ker(f) & & \end{array}$$

Nodes in math-mode

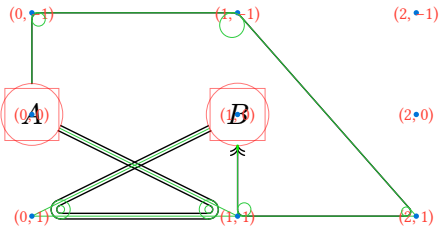
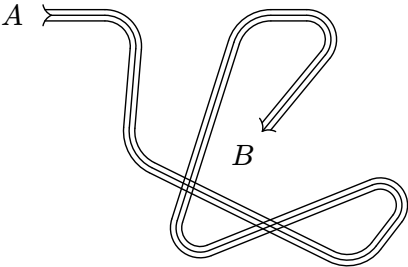
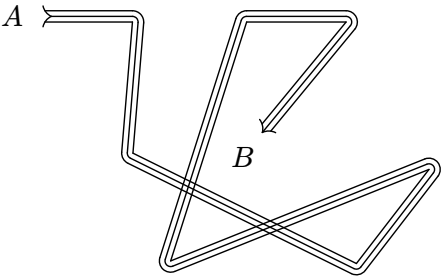
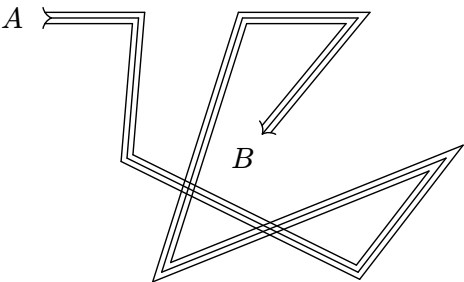


Relative node coordinates

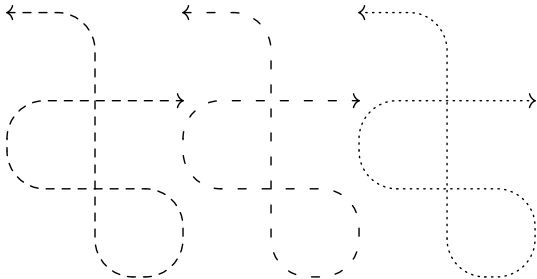
$$\begin{array}{ccc}
 G & \xrightarrow{f} & \text{im}(f) \\
 \pi \downarrow & \nearrow \tilde{f} & \\
 G/\ker(f) & &
 \end{array}$$



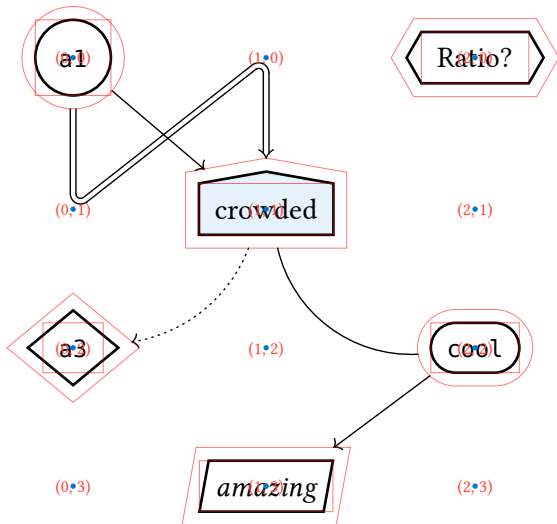
Edge paths



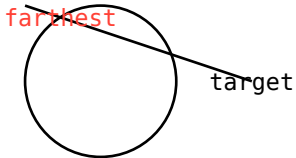
Dashed edge paths



Custom node shapes



Intersection finding



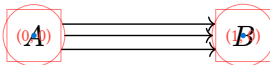
Off-center edges

$(-1, \bullet -1)$

$(0, \bullet -1)$

$(1, \bullet -1)$

$(-1, \bullet 0)$



$(-1, \bullet 1)$

a wide node

$(0, \bullet 1)$

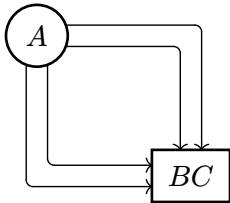
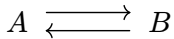
$(1, \bullet 1)$

$(-1, \bullet 2)$

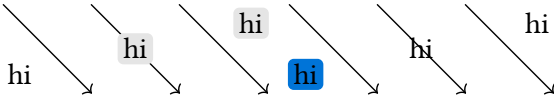
$(0, \bullet 2)$



Edge shift

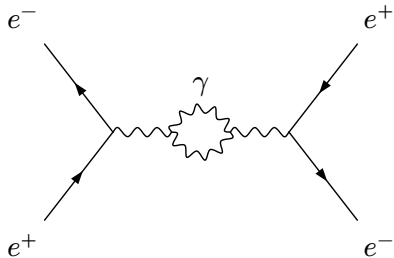


Label fill



Line decorations

$A \leftarrow \text{~~~~~} \rightarrow B \leftarrow \text{~~~~~} \rightarrow C \leftarrow \text{~~~~~} \rightarrow$



$A \text{ ~~~~~} B$

$A \leftarrow \text{~~~~~} B$

$A \leftarrow \text{~~~~~} B$

$A \text{ ~~~~~} B$

Hiding

