quiver

A modern commutative diagram editor

@varkor

24 June 2025

Abstract

The `quiver` package provides compatibility with the `quiver` commutative diagram editor.

1 Usage

The `quiver` package is intended to be used in conjunction with the https://q.uiver.app/ commutative diagram editor. It functions as a wrapper around the `tikz-cd` package that provides some extra Ti*k*Z styles, which are used in diagrams exported by the editor. However, these styles may be used in isolation of the editor.

To use the `quiver` package, add the following to the preamble of your document.
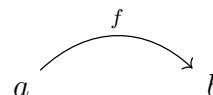
```
\usepackage{quiver}
```

2 Ti*k*Z styles

The `quiver` package provides several styles that are useful in the rendering of commutative diagrams.

2.1 The `curve` style

The typical method of curving arrows in `tikz-cd` commutative diagrams is to use the Ti*k*Z `bend left` and `bend right` styles, together with the `in` and `out` parameters. These styles facilitate the bending of paths with respect to an angle. However, it is often more convenient to bend a path with respect to a distance (namely, the height of the apex of the curve). This may be achieved with the `curve` style[1].

```
\begin{tikzcd}
  a \ar["f", rr,
  ↪  curve={height=-24pt}] && b
\end{tikzcd}
```
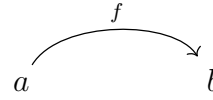

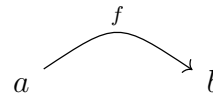The `curve` style takes two (optional) named parameters.

---

[1] The `curve` style is due to AndréC (https://tex.stackexchange.com/users/138900/andr%C3%A9c).

- `height` specifies the height of the apex of the curve. It is a signed distance (default `0`).

- `pos` specifies the position of the control point for the curve. It is a value between `0.0` and `1.0` (default `0.35`).
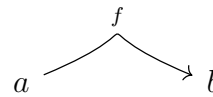
```
\begin{tikzcd}
  a \ar["f", rr,
  ↪   curve={height=-24pt,
  ↪   pos=0.2}] && b
\end{tikzcd}
```

```
\begin{tikzcd}
  a \ar["f", rr,
  ↪   curve={height=-24pt,
  ↪   pos=0.5}] && b
\end{tikzcd}
```
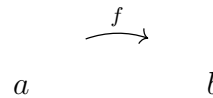
```
\begin{tikzcd}
  a \ar["f", rr,
  ↪   curve={height=-24pt,
  ↪   pos=0.8}] && b
\end{tikzcd}
```

2.2 The `between` style

The typical method of curving arrows in tikz-cd commutative diagrams is to use the TikZ `shorten <` and `shorten >` styles. However, these styles do not interact well with curved paths. The `between` style addresses this shortcoming.

```
\begin{tikzcd}
  a \ar["f", rr,
  ↪   curve={height=-24pt},
  ↪   between={0.3}{0.7}] && b
\end{tikzcd}
```

2.3 Arrowhead and tail styles

The tikz-cd package provides several arrowhead and tail styles. The quiver package provides the following additional styles.

Style	Appearance
`tail reversed`	⟵⟶
`2tail`	⤀⟹
`2tail reversed`	⟺⟹
`no body`	⋯⟩

3 Version history

The quiver version number is tied to the editor version number. This is reflected in the history below: not every editor update corresponds to a package update.

Version	Date	Release notes
1.0.0	2020-11-10	First public version. Imports necessary packages and defines the `curve` style.
1.0.1	2020-11-27	Added the `tail reversed`, `2tail`, and `2tail reversed` styles.
1.1.0	2020-12-18	Added a dependency.
1.2.0	2021-01-11	Added the `no body` style.
1.5.5	2024-06-24	Added the `between` style.