

Test of the **overarrows** package with all options

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1 Loading the package with many options

```
\usepackage[%
  old-arrows, esvecth,
  tikz, pstricks, pstarrows,
  subscripts, allcommands, debug
]{overarrows}
```

2 Options old-arrows and allcommands

```
\TestOverArrow*{\overrightarrow}
```

Test of \overrightarrow and $\overrightarrow*$ macros

\overrightarrow for different math styles

$\backslash displaystyle$	$\backslash textstyle$	$\backslash scriptstyle$	$\backslash scriptscriptstyle$
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\overrightarrow kerning

$$\overrightarrow{t_{\overrightarrow{u}} \overrightarrow{v}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

$\overrightarrow*$ kerning

$$\overrightarrow{t_{\overrightarrow{u}} \overrightarrow{v}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

```
\NewOverArrowCommand{\amsvec}{\amsmath, end={\rightarrow}, shift left=2}
\TestOverArrow*{\amsvec}
```

Test of `\amsvec` and `\amsvec*` macros

`\amsvec` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

`\amsvec` kerning

$$\vec{t}_{\vec{u}} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

`\amsvec*` kerning

$$\vec{t}_{\vec{u}} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

3 Option esvec

```
\NewOverArrowCommand{\esvec}{\esvect}
\TestOverArrow*{\esvec}
```

Test of \esvec and \esvec* macros

\esvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\esvec kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

\esvec* kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

4 Option tikz

```
\NewOverArrowCommand[tikz]{\tikzvec}{}
\TestOverArrow*{\tikzvec}
```

Test of \tikzvec and \tikzvec* macros

\tikzvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\tikzvec kerning

$$\vec{t}_{\vec{u}} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{t} + v_y \vec{j} + v_z \vec{k}$$

\tikzvec* kerning

$$\vec{t}_{\vec{u}} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{t} + v_y \vec{j} + v_z \vec{k}$$

```
\NewOverArrowCommand[tikz]{\thinnertikzvec}{%
  thinner,
}
\NewOverArrowCommand[tikz]{\thickertikzvec}{%
  line thickness={2\overarrowthickness},
}

$$ \thinnertikzvec{v} \quad \tikzvec{v} \quad \thickertikzvec{v} $$
```

$$\vec{v} \quad \vec{v} \quad \vec{v}$$

```

\NewOverArrowCommand[tikz]{\tikzoptvec}{%
  tikz options={line width=2\overarrowthickness},
  path options={arrows={<->}},
  path={(0,0)--(0.5,0.05)},
}
\TestOverArrow*{\tikzoptvec}

```

Test of \tikzoptvec and \tikzoptvec* macros

\tikzoptvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\tikzoptvec kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\tikzoptvec* kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

```

\NewOverArrowCommand[tikz]{\tikzadoptvec}{%
  add tikz options={blue},
  add path options={thick},
  arrows={->>}, min length=20,
}
\TestOverArrow*{\tikzadoptvec}

```

Test of \tikzadoptvec and \tikzadoptvec* macros

\tikzadoptvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\tikzadoptvec kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{t_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\tikzadoptvec* kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{t_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$













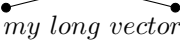
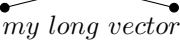
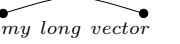
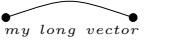
```

\NewOverArrowCommand[tikz]{\tikcodevec}{%
  tikz command={\draw[Circle-Circle](0,0).. controls (0.5,0.3).. (1,0);},
  shift left=-2, space after arrow=0.2ex,
}
\TestOverArrow*{\tikcodevec}

```

Test of `\tikcodevec` and `\tikcodevec*` macros

`\tikcodevec` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
			
			
			
			

`\tikcodevec` kerning

$$\begin{array}{c} t \\ u \\ v \end{array} \quad i_0 \quad v = v_x + v_y + v_z = v_x i + v_y j + v_z k$$

`\tikcodevec*` kerning

$$\begin{array}{c} t \\ u \\ v \end{array} \quad i_0 \quad v = v_x + v_y + v_z = v_x i + v_y j + v_z k$$

5 Option pstricks

```
\NewOverArrowCommand[pstricks]{\pstvec}{}
\TestOverArrow*{\pstvec}
```

Test of \pstvec and \pstvec* macros

\pstvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\pstvec kerning

$$\vec{t}_{\vec{u}_{\vec{v}}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

\pstvec* kerning

$$\vec{t}_{\vec{u}_{\vec{v}}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$


```
\NewOverArrowCommand[pstricks]{\pstTbarandarrows}{arrow={|<->|}, center arrow}
\TestOverArrow*{\pstTbarandarrows}
```

Test of \pstTbarandarrows and \pstTbarandarrows* macros

\pstTbarandarrows for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\pstTbarandarrows kerning

$$\overrightarrow{t_{\overrightarrow{u_{\overrightarrow{v}}}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\pstTbarandarrows* kerning

$$\overrightarrow{t_{\overrightarrow{u_{\overrightarrow{v}}}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

```

\NewOverArrowCommand[pstricks]{\pstsmallbluearrow}{
  psset = {arrowscale=0.5, arrowinset=0, linecolor=blue},
  thinner,
}
\TestOverArrow*{\pstsmallbluearrow}

```

Test of \pstsmallbluearrow and \pstsmallbluearrow* macros

\pstsmallbluearrow for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\pstsmallbluearrow kerning

$$\overrightarrow{t_{\overrightarrow{u}_{\overrightarrow{v}}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\pstsmallbluearrow* kerning

$$\overrightarrow{t_{\overrightarrow{u}_{\overrightarrow{v}}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

```

\NewOverArrowCommand[pstricks]{\psellipticarrow}{
  pstricks command={%
    \psellipticarcn{->}%
    (0.5\overarrowlength,0.2\overarrowlength)%
    (0.5\overarrowlength,0.2\overarrowlength)%
    {170}{10}
  },
  geometry={(0,0.2\overarrowlength)(\overarrowlength,0.4\overarrowlength)},
  center arrow,
}
\TestOverArrow*{\psellipticarrow}

```

Test of `\psellipticarrow` and `\psellipticarrow*` macros

`\psellipticarrow` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

`\psellipticarrow` kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{t} + v_y \vec{j} + v_z \vec{k}$$

`\psellipticarrow*` kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{t} + v_y \vec{j} + v_z \vec{k}$$

6 Option pstarrows

```
\NewOverArrowCommand[picture]{\picvec}{}
\TestOverArrow*{\picvec}
```

Test of \picvec and \picvec* macros

\picvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\vec{v}	\vec{v}	\vec{v}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\picvec kerning

$$\overrightarrow{t_{\overrightarrow{u} \overrightarrow{v}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\picvec* kerning

$$\overrightarrow{t_{\overrightarrow{u} \overrightarrow{v}}} \quad \overrightarrow{i_0} \quad \overrightarrow{v} = \overrightarrow{v_x} + \overrightarrow{v_y} + \overrightarrow{v_z} = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

7 Option subscripts

```
\NewOverArrowCommand{\subvec}{min length=30}
\NewOverArrowCommand{\nosubvec}{min length=30, detect subscripts=false}
\TestOverArrow*{\subvec}
\TestOverArrow*{\nosubvec}
```

Test of \subvec and \subvec* macros

\subvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\subvec kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i} \overrightarrow{0} \quad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\subvec* kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i} \overrightarrow{0} \quad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

Test of \nosubvec and \nosubvec* macros

\nosubvec for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}
\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}	\overrightarrow{AB}
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

\nosubvec kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i} \overrightarrow{0} \quad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$

\nosubvec* kerning

$$\overrightarrow{t} \overrightarrow{u} \overrightarrow{v} \quad \overrightarrow{i} \overrightarrow{0} \quad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$$