# Test of the **overarrows** package without options

Julien Labbé

July 11, 2024

# 1 Loading the package without options

\usepackage{overarrows}

# 2 Tests of type symb with amsmath config

Test of \amsvector and \amsvector* macros					
\amsvector for different math styles					
\displaystyle \textstyle \scriptstyle \scriptstyle					
$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$		
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$		
$\overrightarrow{\operatorname{grad}}$	$\overrightarrow{\operatorname{grad}}$	$\overrightarrow{\operatorname{grad}}$	$\overrightarrow{\text{grad}}$		
$\overrightarrow{ny \ long \ vector}$	$\overrightarrow{my\ long\ vector}$	$\xrightarrow{my\ long\ vector}$	$\overrightarrow{my}\ long\ vector$		
	\amsvecto	r kerning			
$\overrightarrow{t}_{\overrightarrow{u}\overrightarrow{J}} \qquad \overrightarrow{r}_0 \qquad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$					
\amsvector* kerning					
$\overrightarrow{t_{\overrightarrow{y}}}$ $\overrightarrow{v}$					

\NewOverArrowCommand{\amsstrictvector}{amsmath=strict} \TestOverArrow\*{\amsstrictvector}

# Test of \amsstrictvector and \amsstrictvector\* macros

#### \amsstrictvector for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	₹
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\xrightarrow{\text{grad}}$	$\overset{\longrightarrow}{\operatorname{grad}}$	$\xrightarrow{\text{grad}}$	$\overrightarrow{\operatorname{grad}}$
$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$	$\xrightarrow{my\ long\ vector}$	$\xrightarrow{my\ long\ vector}$

### \amsstrictvector kerning

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

## \amsstrictvector\* kerning

$$\overrightarrow{t}_{\overrightarrow{u}_{\overrightarrow{v}}} \qquad \overrightarrow{\imath_0} \qquad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{\imath} + v_y \overrightarrow{\jmath} + v_z \overrightarrow{k}$$

# 3 Tests of type symb with esvect config

Test of \	Test of \esvector and \esvector* macros \esvector for different math styles			
\es				
\displaystyle \textstyle \scriptstyle \scriptstyle				
$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	
$\overrightarrow{\operatorname{grad}}$	$\overrightarrow{\operatorname{grad}}$	$\overrightarrow{\operatorname{grad}}$	grad	
ny long vector	$\overrightarrow{my \ long \ vector}$	$\overrightarrow{my\ long\ vector}$	my long vector	
	\esvecto:	r kerning		
$\overrightarrow{t}_{\overrightarrow{u}\overrightarrow{v}} \qquad \overrightarrow{i}_0 \qquad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{i} + v_y \overrightarrow{j} + v_z \overrightarrow{k}$				
\esvector* kerning				
$\vec{t}_{\vec{u}\vec{r}} \qquad \vec{v}_0 \qquad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$				

\NewOverArrowCommand{\esstrictvector}{esvect=strict}
\TestOverArrow\*{\esstrictvector}

## Test of \esstrictvector and \esstrictvector\* macros

#### \esstrictvector for different math styles

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

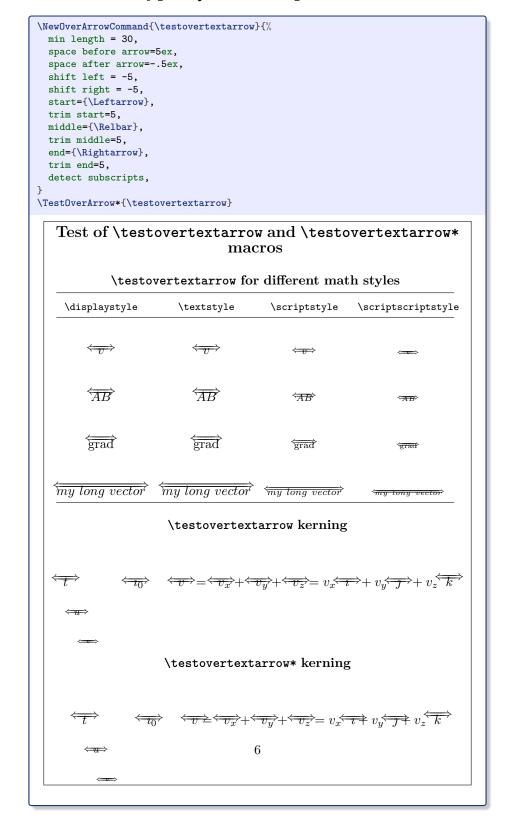
#### \esstrictvector kerning

$$\overrightarrow{t}_{\overrightarrow{u}\overrightarrow{v}} \qquad \overrightarrow{t}_0 \qquad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{\imath} + v_y \overrightarrow{\jmath} + v_z \overrightarrow{k}$$

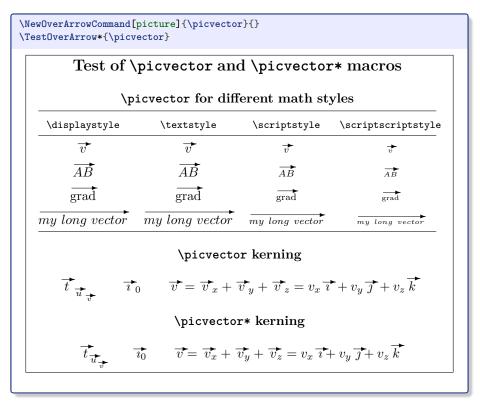
\esstrictvector\* kerning

$$\overrightarrow{t}_{\overrightarrow{u}\overrightarrow{v}} \qquad \overrightarrow{\imath}_0 \qquad \overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x \overrightarrow{\imath} + v_y \overrightarrow{\jmath} + v_z \overrightarrow{k}$$

## 4 Tests of type symb with options



## 5 Tests of type picture without options



## 6 Tests of type picture with options

```
| NewOverArrowCommand[picture] {\thinnerpicvector} {\% thinner, } 
| NewOverArrowCommand[picture] {\thickerpicvector} {\% line thickness=2\overarrowthickness, } 
| $\$ \thinnerpicvector{v} \qquad \picvector{v} \qquad \thickerpicvector{v} $\$

| $\$ \thinnerpicvector{v} \qquad \thickerpicvector{v} $\$
```

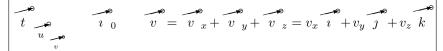
```
\NewOverArrowCommand[picture] {\testoverpicarrow} {%
    shift left=2,
    shift right=-5,
    min length=30,
    geometry={(\overarrowlength,2ex)(0,-1ex)},
    picture command={%
        \put(0.8\overarrowlength,0.2\overarrowlength) {%
        \circle{0.2\overarrowlength}
        }%
        \put(0,0) {\vector(4,1) {0.85\overarrowlength}}},%
}
```

# Test of \testoverpicarrow and \testoverpicarrow\* macros

#### \testoverpicarrow for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
	_ <del></del>	_ <del></del>	
v	v	v	v
_ <del></del>	<b>→</b>	<b>→</b>	_ <b>*</b> *
AB	AB	AB	$\overline{AB}$
<b>→</b>	<b>→</b>	_ <del></del>	<b>₩</b>
grad (*)	grad (*)	$\operatorname{grad}$	grad 🔾
$my\ long\ vector$	$my\ long\ vector$	$my\ long\ vector$	my long vector

#### \testoverpicarrow kerning



#### \testoverpicarrow\* kerning

