# Title

#### Author

#### 14 octobre 2024

## 1 Geometry

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Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

### 2 Boxes

#### 2.1 Théorème

\begin{theoreme}{Title}{reference}
 Text
\end{theoreme}

Théorème 2.1 - Title

Text

Can be referred with

\ref{thm:reference}

#### 2.2 Méthode

\begin{methode}{Title}{reference}
 Text
\end{methode}

Méthode 2.1: Title

Text

Can be referred with

\ref{method:reference}

## 2.3 Propriété

```
\begin{propriete}{Title}{reference}
    Text
\end{propriete}
```

## Propriété 2.1 – Title

Text

Can be referred with

\ref{prop:reference}

#### 2.4 Définition

```
\begin{definition}{Title}{reference}
    Text
\end{definition}
```

#### Définition 2.1 – Title

Text

Can be referred with

\ref{def:reference}

## 2.5 Warning

\begin{warning}
 Text
\end{warning}

Text

### 2.6 Preuve

\begin{preuve}
 Text
\end{preuve}

Démonstration.

Text

## 2.7 Exemple

## 2.7.1 Unamed exemple

\begin{uexemple}
 Text
\end{uexemple}

Exemple													
Text													
ICAO													

# 2.7.2 Named exemples

\exemple{Title}{Text}{Solution}

Text	Exemple - Title		
	Text		

Solution can be empty.

\exemple{Title}{Text}{}

Exemple - Title														
Text														
TCX0														

# 3 Commands

\Real{Expr}	$\Re e(Expr)$	Real part of Expr
\Imag{Expr}	$\mathfrak{Im}\left(Expr\right)$	Imaginary part of Expr
\Im{Expr}	$\operatorname{Im}\left(Expr\right)$	Image of Expr
\Ker{Expr}	$\operatorname{Ker}\left(Expr\right)$	Kernel of Expr
\$\R\$	$\mathbb{R}$	Real
\$\C\$	$\mathbb{C}$	Complex
\$\K\$	$\mathbb{K}$	K
\$\N\$	N	Naturals
\$\Z\$	$\mathbb{Z}$	Relatives
\PolyC	$\mathbb{C}[X]$	Complex Polynom
\PolyC[deg]	$\mathbb{C}_2[X]$	Complex Polynom (deg inferior to deg)
\PolyR	$\mathbb{R}[X]$	Real Polynom
\PolyR[deg]	$\mathbb{R}_2[X]$	Real Polynom (deg inferior to deg)
\Poly	$\mathbb{K}[X]$	K Polynom
\Poly[deg]	$\mathbb{K}_2[X]$	K Polynom (deg inferior to deg)
\MatC	$\mathcal{M}(\mathbb{C})$	Complex matrix
\MatC[deg]	$\mathcal{M}_2(\mathbb{C})$	Complex matrix (deg inferior to deg)
\MatR	$\mathcal{M}(\mathbb{R})$	Real matrix
\MatR[deg]	$\mathcal{M}_2(\mathbb{R})$	Real matrix (deg inferior to deg)
\Mat	$\mathcal{M}(\mathbb{K})$	$\mathbb{K} \text{ matrix}$
\Mat[deg]	$\mathcal{M}_2(\mathbb{K})$	K matrix (deg inferior to deg)
\Matbf{f}	$\operatorname{Mat}_{\mathscr{B}}(f)$	
\Matbf[\N]{f}	$\operatorname{Mat}_{\mathbb{N}}(f)$	
<pre>\$\Serie[var][start]{Expr}\$</pre>	$\sum_{\substack{var=start}}^{+\infty} Expr$	(default: var=k, start=0)
<pre>\$\Int[start][var]{Expr}\$</pre>	$\int_{start}^{+\infty} Expr$ dvar	(default: start=0, var=x)
\$\Lim[var][to]{Expr}\$	$\lim_{var\to to} Expr$	(default: var=x, to= $+\infty$ )
<pre>\$\diff[var][order]{Expr}\$</pre>	$\frac{\partial (Expr)^{order}}{\partial van^{order}}$	$(default: var=x, order=\emptyset)$
\$\diff[var]{Expr}\$	$\frac{\partial var^{order}}{\partial Expr} = \frac{\partial Expr}{\partial var}$	,
\$\lvec\$	$(\vec{x_1} \dots \vec{x_n})$	
	$ \vec{x}_1\rangle$	
\$\cvec\$		
\$\App[Space][Expr]\$	$\mathcal{L}_{Expr}(Space)$	$(\text{default: Space=E, Expr=}\emptyset)$
Ψ (πρρ [phace] [πχρ1] ψ	= Expr(DPace)	(default. ppace—E, Expi—v)

# 4 Aliases

\ds	\displaystyle
	$\mathbb{T}$