

# Technical details on texvc identifier extraction

Moritz Schubotz

October 6, 2015

## 1 Introduction

This document describes which mathematical symbols are identified as identifiers. In general every single Latin letter [a-zA-Z] is regarded as identifier. In addition, we accept multi-letter-subscripts that match [0-9a-zA-Z]+, such as  $a_0$  but also  $\varepsilon_{ijk}$ . Moreover, the Literals described in section 2, and the Identifier variants (section 3) are supported.

## 2 Literals

The following literals are supported:

- `\aleph` is rendered as  $\aleph$
- `\alpha` is rendered as  $\alpha$
- `\amalg` is rendered as  $\amalg$
- `\backepsilon` is rendered as  $\epsilon$
- `\Bbbk` is rendered as  $\mathbb{k}$
- `\beta` is rendered as  $\beta$
- `\beth` is rendered as  $\beth$
- `\chi` is rendered as  $\chi$
- `\complement` is rendered as  $\complement$
- `\daleth` is rendered as  $\daleth$
- `\delta` is rendered as  $\delta$
- `\Delta` is rendered as  $\Delta$
- `\digamma` is rendered as  $\digamma$
- `\ell` is rendered as  $\ell$
- `\emptyset` is rendered as  $\emptyset$
- `\epsilon` is rendered as  $\epsilon$
- `\eta` is rendered as  $\eta$
- `\eth` is rendered as  $\eth$

`\Finv` is rendered as  $\mathfrak{f}$   
`\flat` is rendered as  $\flat$   
`\Game` is rendered as  $\mathcal{O}$   
`\gamma` is rendered as  $\gamma$   
`\Gamma` is rendered as  $\Gamma$   
`\gimel` is rendered as  $\beth$   
`\hbar` is rendered as  $\hbar$   
`\hslash` is rendered as  $\hbar$   
`\Im` is rendered as  $\Im$   
`\imath` is rendered as  $\imath$   
`\infty` is rendered as  $\infty$   
`\intercal` is rendered as  $\intercal$   
`\iota` is rendered as  $\iota$   
`\jmath` is rendered as  $\jmath$   
`\kappa` is rendered as  $\kappa$   
`\lambda` is rendered as  $\lambda$   
`\Lambda` is rendered as  $\Lambda$   
`\mho` is rendered as  $\mathcal{U}$   
`\mu` is rendered as  $\mu$   
`\natural` is rendered as  $\natural$   
`\nu` is rendered as  $\nu$   
`\omega` is rendered as  $\omega$   
`\Omega` is rendered as  $\Omega$   
`\P` is rendered as  $\P$   
`\phi` is rendered as  $\phi$   
`\Phi` is rendered as  $\Phi$   
`\pi` is rendered as  $\pi$   
`\Pi` is rendered as  $\Pi$   
`\pitchfork` is rendered as  $\pitchfork$   
`\psi` is rendered as  $\psi$   
`\Psi` is rendered as  $\Psi$   
`\Re` is rendered as  $\Re$   
`\rho` is rendered as  $\rho$   
`\S` is rendered as  $\S$   
`\sigma` is rendered as  $\sigma$   
`\Sigma` is rendered as  $\Sigma$   
`\tau` is rendered as  $\tau$   
`\theta` is rendered as  $\theta$   
`\Theta` is rendered as  $\Theta$   
`\top` is rendered as  $\top$   
`\varepsilon` is rendered as  $\varepsilon$

`\varkappa` is rendered as  $\varkappa$   
`\varnothing` is rendered as  $\varnothing$   
`\varphi` is rendered as  $\varphi$   
`\varpi` is rendered as  $\varpi$   
`\varrho` is rendered as  $\varrho$   
`\varsigma` is rendered as  $\varsigma$   
`\vartheta` is rendered as  $\vartheta$   
`\wp` is rendered as  $\wp$   
`\xi` is rendered as  $\xi$   
`\Xi` is rendered as  $\Xi$   
`\zeta` is rendered as  $\zeta$

### 3 Identifier variants

The following variants are supported<sup>1</sup>:

`\acute` applied on  $x, X$  is rendered as  $\acute{x}, \acute{X}$   
`\bar` applied on  $x, X$  is rendered as  $\bar{x}, \bar{X}$   
`\bcancel` applied on  $x, X$  is rendered as  $\mathbb{X}, \mathbb{X}$   
`\bmod` applied on  $x, X$  is rendered as  $\bmod x, \bmod X$   
`\boldsymbol` applied on  $x, X$  is rendered as  $\mathbf{x}, \mathbf{X}$   
`\breve` applied on  $x, X$  is rendered as  $\breve{x}, \breve{X}$   
`\cancel` applied on  $x, X$  is rendered as  $\cancel{x}, \cancel{X}$   
`\check` applied on  $x, X$  is rendered as  $\check{x}, \check{X}$   
`\ddot` applied on  $x, X$  is rendered as  $\ddot{x}, \ddot{X}$   
`\dot` applied on  $x, X$  is rendered as  $\dot{x}, \dot{X}$   
`\emph` applied on  $x, X$  is rendered as  $x, X$   
`\grave` applied on  $x, X$  is rendered as  $\grave{x}, \grave{X}$   
`\hat` applied on  $x, X$  is rendered as  $\hat{x}, \hat{X}$   
`\mathbb` applied on  $x, X$  is rendered as  $\mathbb{x}, \mathbb{X}$   
`\mathbf` applied on  $x, X$  is rendered as  $\mathbf{x}, \mathbf{X}$   
`\mathbin` applied on  $x, X$  is rendered as  $x, X$   
`\mathcal` applied on  $x, X$  is rendered as  $\mathcal{x}, \mathcal{X}$   
`\mathclose` applied on  $x, X$  is rendered as  $x, X$   
`\mathfrak` applied on  $x, X$  is rendered as  $\mathfrak{x}, \mathfrak{X}$   
`\mathit` applied on  $x, X$  is rendered as  $x, X$   
`\mathop` applied on  $x, X$  is rendered as  $x, X$   
`\mathopen` applied on  $x, X$  is rendered as  $x, X$   
`\mathord` applied on  $x, X$  is rendered as  $x, X$

---

<sup>1</sup>Note that `\mathcal` is not available for lowercase Latin letters.

$\backslash\mathrm{mathpunct}$  applied on  $x, X$  is rendered as  $x, X$   
 $\backslash\mathrm{mathrel}$  applied on  $x, X$  is rendered as  $x, X$   
 $\backslash\mathrm{mathrm}$  applied on  $x, X$  is rendered as  $\mathrm{x}, \mathrm{X}$   
 $\backslash\mathrm{mathsf}$  applied on  $x, X$  is rendered as  $\mathsf{x}, \mathsf{X}$   
 $\backslash\mathrm{mathtt}$  applied on  $x, X$  is rendered as  $\mathtt{x}, \mathtt{X}$   
 $\backslash\mathrm{operatorname}$  applied on  $x, X$  is rendered as  $\mathrm{x}, \mathrm{X}$   
 $\backslash\mathrm{overleftarrow}$  applied on  $x, X$  is rendered as  $\overleftarrow{x}, \overleftarrow{X}$   
 $\backslash\mathrm{overleftrightarrow}$  applied on  $x, X$  is rendered as  $\overleftrightarrow{x}, \overleftrightarrow{X}$   
 $\backslash\mathrm{overline}$  applied on  $x, X$  is rendered as  $\overline{x}, \overline{X}$   
 $\backslash\mathrm{overrightarrow}$  applied on  $x, X$  is rendered as  $\overrightarrow{x}, \overrightarrow{X}$   
 $\backslash\mathrm{textbf}$  applied on  $x, X$  is rendered as  $\mathbf{x}, \mathbf{X}$   
 $\backslash\mathrm{textit}$  applied on  $x, X$  is rendered as  $x, X$   
 $\backslash\mathrm{textrm}$  applied on  $x, X$  is rendered as  $\mathrm{x}, \mathrm{X}$   
 $\backslash\mathrm{textsf}$  applied on  $x, X$  is rendered as  $\mathsf{x}, \mathsf{X}$   
 $\backslash\mathrm{texttt}$  applied on  $x, X$  is rendered as  $\mathtt{x}, \mathtt{X}$   
 $\backslash\mathrm{tilde}$  applied on  $x, X$  is rendered as  $\tilde{x}, \tilde{X}$   
 $\backslash\mathrm{underline}$  applied on  $x, X$  is rendered as  $\underline{x}, \underline{X}$   
 $\backslash\mathrm{vec}$  applied on  $x, X$  is rendered as  $\vec{x}, \vec{X}$   
 $\backslash\mathrm{widehat}$  applied on  $x, X$  is rendered as  $\hat{x}, \hat{X}$   
 $\backslash\mathrm{widetilde}$  applied on  $x, X$  is rendered as  $\widetilde{x}, \widetilde{X}$   
 $\backslash\mathrm{xcancel}$  applied on  $x, X$  is rendered as  $\cancel{x}, \cancel{X}$   
 $\backslash\mathrm{xleftarrow}$  applied on  $x, X$  is rendered as  $\xleftarrow{x}, \xleftarrow{X}$   
 $\backslash\mathrm{xrightarrow}$  applied on  $x, X$  is rendered as  $\xrightarrow{x}, \xrightarrow{X}$   
 $\backslash\mathrm{Bbb}$  applied on  $x, X$  is rendered as  $\mathbb{x}, \mathbb{X}$   
 $\backslash\mathrm{bold}$  applied on  $x, X$  is rendered as  $\mathbf{x}, \mathbf{X}$