

## 1 Introduction

XITS is Times-like font for scientific publishing with support for mathematical typesetting. It has wide coverage of Latin, Greek and Cyrillic scripts, as well as extensive coverage of Unicode symbols used in mathematics and other fields of science. XITS supports also proper mathematical typesetting and can be used to typeset complex mathematical equations in modern  $\text{\TeX}$  engines, namely  $\text{Lua\TeX}$  and  $\text{Xe\TeX}$ , as well as Microsoft Office starting from 2007 version.

XITS is available as an OpenType font, in four styles; regular, bold, italic and bold italics, besides the maths font.

## 2 Font features

XITS supports the following OpenType features:

| feature   | Description                                     |
|---|---|
| <i>All fonts</i>                                    |   |
| kern  | Kerning   |
| liga  | Ligatures                                       |
| onum  | Oldstyle numbers                                |
| frac  | Diagonal fractions                              |
| <i>The maths font, supports additional features</i> |   |
| ss01  | Mathematical Calligraphic Alphabet              |
| ss02  | Mathematical Greek Sans Serif Alphabet          |
| ss03  | Mathematical Italic Sans Serif Digits           |
| ss04  | Mathematical Bold Monospace Digits              |
| ss05  | Mathematical Bold Double-Struck Alphabet        |
| ss06  | Mathematical Italic Double-Struck Alphabet      |
| ss07  | Mathematical Bold Italic Double-Struck Alphabet |
| ss08  | Upright Integrals                               |
| ss09  | Negated Symbols With Vertical Stroke            |

## 3 Installation

### 3.1 ConTeXt

ConTeXt MkIV are needed for using the math font, text fonts can be used with either MkIV or MkII with XeTeX engine, MkII with pdfTeX is not supported.

Recent versions of ConTeXt already have typescripts for XITS, so just installing the fonts into TEXMF tree is enough.

### 3.2 L<sup>A</sup>T<sub>E</sub>X

A modern TeX engine with Unicode and OpenType support is needed, namely LuaTeX or XeTeX. In addition to fontspec package, unicode-math is needed for using XITS fonts in math mode.

If you are using LuaTeX then you can either install the fonts OS wide or in TEXMF tree. If you are using XeTeX then you need to either install fonts OS wide, or adapt your fontconfig configuration to look for fonts installed under TEXMF tree, otherwise you will not be able to access fonts by font name.

### 3.3 MS Office

MS Office 2007 or newer is required, please refere to Microsoft's [Installing fonts on Windows](#) for general font instalation instruction.

## 4 Usage

### 4.1 L<sup>A</sup>T<sub>E</sub>X

#### 4.1.1 Examples

```
\documentclass{article}
\usepackage{unicode-math}
\setmainfont{XITS}
\setmathfont{XITS Math}

\begin{document}
```

```
Text $x+y=\sqrt{z}$  
\end{document}
```

## 4.2 ConTeXt

### 4.2.1 Examples

```
\setupbodyfont[xits]  
  
\starttext  
Text $x+y=\sqrt{z}$  
\stoptext
```