

Основи на L^AT_EX

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1 Accents & special characters

2 International language support

3 X_ƎL^AT_EX

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3 \XeLaTeX

Accents & special characters

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International language support

X_Y-L^AT_EX

ò	\'o	ó	\'o	ô	\ô	õ	\õ
ō	\=o	ò	\.o	ö	\"o	ç	\c c
ǒ	\u o	ǒ	\v o	Ǔ	\H o	ø	\c o
ø	\d o	ø	\b o	ö	\t oo		
œ	\oe	Œ	\OE	æ	\ae	Æ	\AE
å	\aa	Å	\AA				
ø	\o	Ø	\O	ı	\l	Ł	\L
ı	\i	ı	\j	ı	!'	ı	?'

Accents & special characters

ò	\`o	ó	\'o	ô	\ô	õ	\õ
ō	\=o	ò	\.o	ö	\"o	ç	\c c
ǒ	\u o	ǒ	\v o	ó	\H o	ø	\c o
ø	\d o	œ	\b o	ö	\t oo		
œ	\oe	Œ	\OE	æ	\ae	Æ	\AE
å	\aa	Å	\AA				
ø	\o	Ø	\O	ı	\l	Ł	\L
ı	\i	ı	\j	ı	!'	ı	?'

```
H\^otel, na\"i ve, \'el\'eve, \\
sm\o rrebr\o d, !'Se\~norita!, \\
Sch\"onbrunner Schlo\ss{} Stra\ss e
```

Hôtel, naïve, élève,
smørrebrød, ¡Señorita!,
Schönbrunner Schloß Straße

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3 X_ƎL^AT_EX

International language support

- Table of contents, list of figures, list of tables ... adapted to the language of interest
- Appropriate hyphenation rules
- Specific typographic rules

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```
\documentclass { ... }  
\usepackage [ language ] { babel }
```

International language support

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- Appropriate hyphenation rules
- Specific typographic rules

```
\documentclass { ... }  
\usepackage [ language ] { babel }
```

The default language is always the last one!

```
\documentclass { ... }  
\usepackage [ languageA , languageB ] { babel }  
...  
\selectlanguage { languageA }
```

Input encodings

In addition you need

```
\usepackage[encoding]{inputenc}
```

Operating system	Encodings	
	Western Latin	Cyrillic
Mac	applemac	Cyrillic
Unix	latin1	koi8-ru
Windows	ansinew	cp1251
DOS, OS/2	cp850	cp866nav

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Universal use

```
\usepackage [ utf 8 ] { inputenc }
```

UTF-8 – a variable-width encoding that can represent every character in the Unicode character set

Font encodings

```
\usepackage[encoding]{fontenc}
```

- *Extended Cork* – T1 contains letters and punctuations characters for most of the European languages
- LH – T2A, T2B, T2C, X2 for Cyrillic
- CB – LGR for Greek

Advantage

Improve/enable hyphenation in **non-English** documents.

Writing in Cyrillic

```
\usepackage{mathtext}
\usepackage[T1,T2A]{fontenc}
\usepackage[koi8-ru]{inputenc}
\usepackage[english,bulgarian,russian,ukrainian]{babel}
```

Критични явления

X. Шамати

25 февруари 2014 г.

Ефектите на крайните размери на системата и граничните условия са от фундаментално значение за съвременната теория на фазовите преходи и критичните явления [1]. . . .

Литература

- [1] H. Chamati, “Theory of phase transitions: From magnets to biomembranes,” in *Advances in Planar Lipid Bilayers and Liposomes* (Aleš Iglič and Julia Genova, ed.), vol. 17, pp. 237–285, Academic Press, 2013.

```
\documentclass[12pt]{article}
\usepackage[cp1251]{inputenc}
\usepackage[T2C]{fontenc}
\usepackage[bulgarian]{babel}
\usepackage[square,sort&compress,numbers]{natbib}
\bibliographystyle{ieeetr}
\pagestyle{empty}
\begin{document}
```

```
\title{Критични явления}
\author{X. Шамати}
\maketitle
```

Ефектите на крайните размери на системата и граничните условия са от фундаментално значение за съвременната теория на фазовите преходи и критичните явления \cite{chamati_theory_2013}. \ldots

```
\bibliography{biblio}
\end{document}
```

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3 X_YL^AT_EX

The fonts

```
\usepackage{fontspec}
\setmainfont[Mapping=tex-text]{your font of choice}
\setsansfont[Mapping=tex-text]{your Sans}
\setromanfont[Mapping=tex-text]{your Serif}
\setmonofont[Mapping=tex-text]{your Mono}
```

International languages support

```
\usepackage{polyglossia}
\setdefaultlanguage[babelshorthands]{languageA}
\setotherlanguage{languageB}
...
\begin{languageB}
...
\end{languageB}
```

In case you prefer opentype math fonts

```
\usepackage{unicode-math}
\setmathfont[options]{xits-math.otf}
```


Заглавието

Авторът

25 февруари 2014 г.

$$H = \sum_{(i,j)} s_i s_j \quad (1)$$

Теорията на фазовите преходи се основава на разглеждане на „идеализирани“ класически модели, например моделът на Изинг (1): система от магнитни моменти (намиращи се на възлите на проста кубична решетка), всеки от които има две възможни състояния [1]. ...

Литература

- [1] H. Chamati, “Theory of phase transitions: From magnets to biomembranes,” in *Advances in Planar Lipid Bilayers and Liposomes* (Aleš Igljič and Julia Genova, ed.), vol. 17, pp. 237–285, Academic Press, 2013.

```

\documentclass[12pt]{article}
\usepackage[paper=a4paper]{geometry}
\usepackage{amsmath}
\usepackage{unicode-math}
\setmathfont[math-style=TeX,bold-style=ISO,sans-style=italic]{xits-math.otf}
\setmathfont[range={\mathcal,\mathbfcal},StylisticSet=1]{xits-math.otf}
\usepackage{fontspec}
\setmainfont[Mapping=tex-text]{FreeSerif}
\setsansfont[Mapping=tex-text]{FreeSans}
\setromanfont[Mapping=tex-text]{FreeSerif}
\setmonofont[Mapping=tex-text]{FreeMono}
\defaultfontfeatures{Scale=MatchLowercase}
\usepackage{babelshorthands}{polyglossia}
\setdefaultlanguage{bulgarian}
\setotherlanguage{english}
\usepackage[square,sort&compress,numbers,elide,merge]{natbib}
\bibliographystyle{ieeetr}
\bibsep 0.0\baselineskip
\begin{document}
\title{}
\author{}
\maketitle
\begin{equation}\label{ising}
\mathcal{H} = \sum \langle i,j \rangle s_i s_j

```

Defining new font faces

```
\newfontface\paladinbi{Free Paladin Bold Italic}  
\newfontface\schoolbbi[Color=00AA00]{Free Schoolbook Bold Italic}  
\newfontface\timesbi[Color=0000AA]{Free Times Bold Italic}  
\newfontface\liberbi[Color=0000AA]{Liberation Serif Bold Italic}  
\newfontface\urw[Color=0000AA,Scale=0.9]{URW Bookman L Demi Bold Italic}
```

Българска академия на науките

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