

# L<sup>A</sup>T<sub>E</sub>X Style For *Deutsches Museum* \*

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## Abstract

This package provides class for typesetting books for Deutsches Museum,  
<https://www.deutsches-museum.de>

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Options</b>	<b>2</b>
<b>3</b>	<b>Floats</b>	<b>2</b>
<b>4</b>	<b>Front matter</b>	<b>2</b>
<b>5</b>	<b>Bibliography</b>	<b>3</b>
<b>6</b>	<b>Implementation</b>	<b>4</b>
6.1	Identification . . . . .	4
6.2	Options . . . . .	4
6.3	Loading Class and Packages . . . . .	5
6.4	Fonts . . . . .	5
<b>7</b>	<b>Page dimensions and paragraphing</b>	<b>6</b>
<b>8</b>	<b>Colors</b>	<b>7</b>
<b>9</b>	<b>Front matter</b>	<b>7</b>
9.1	Sectioning . . . . .	7
<b>10</b>	<b>Footnotes</b>	<b>8</b>
<b>11</b>	<b>Page styles</b>	<b>8</b>
<b>12</b>	<b>Floats</b>	<b>8</b>
<b>13</b>	<b>Bibliography</b>	<b>8</b>
13.1	End of Class . . . . .	9

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Font	File
Garamond BQ Regular	GaramondBQ-Regular.otf
Garamond BQ Italic	GaramondBQ-Italic.otf
Garamond BQ Bold	GaramondBQ-Bold.otf
Garamond BQ Medium Italic	GaramondBQ-MediumItalic.otf
Futura PT Light	futura-pt_light.otf
Futura PT Light Oblique	futura-pt_light-oblique.otf
Futura PT Medium	futura-pt_medium.otf
Futura PT Medium Oblique	futura-pt_medium-oblique.otf
Futura PT Condensed Medium	futura-pt_cond-medium.otf
Futura PT Condensed Medium Oblique	futura-pt_cond-medium-oblique.otf

Table 1: Commerical fonts (if the option `cfonts` is used)

## 1 Introduction

Deutsches museum regularly publishes studies. This package provides the way to the authors to format the contributions in L<sup>A</sup>T<sub>E</sub>X.

## 2 Options

*options* The contributions to Deutsches Museum should use their fonts: Garamond  
`cfonts` Berthold BQ and Futura PT. You probably want to buy them and install. If  
`nocfonts` you do not have them, use the options `nocfonts` to substitute them for free fonts  
available in standard T<sub>E</sub>X distriutions. The option `cfonts` (the default) uses commercial fonts.

In both cases the package uses fonts in OTF formats, so you need to use LuaT<sub>E</sub>X or XeT<sub>E</sub>X for the compilation.

If you use commercial fonts, the package expects the file names listed in Table 1.

*option* By default the class uses *unicode-math* with Garamond math package. The  
`garamondmath,nogaramondmath` option `nogaramondmath` disables this behavior, so you can experiment with other  
math styles.

Internally the class uses *amsart*, so all its options are supported.

*option* Deutsches Museum prefers to put running titles and page numbers in the post  
`folios,nofolios` production, so we omit them by default. The option `folios` restores them, while  
the option `nofolios` (default) suppresses them.

## 3 Floats

We put captions *before* tables and *after* figures.

## 4 Front matter

`\title` As in *amsart* package, the `\title` command has an optional argument, that defines  
`\shorttitle` `\shorttitle` macro, used for running heads.  
`\subtitle` Deutsches Museum contributions, along with the title, have `\subtitle`. The

running heads pick either short title, or subtitle, whichever is defined last. You can override this choice by redefining `\shorttitle`. Examples

`abstract`     Abstract, if present, should follow `\maketitle`

## 5 Bibliography

The package uses `bibliography` in footnotes and `natbib` for formatting the bibliography list. The command `\cite` produces footnote citations.

## 6 Implementation

### 6.1 Identification

We start with the declaration who we are. Most `.dtx` files put driver code in a separate driver file `.drv`. We roll this code into the main file, and use the pseudo-guard `<gobble>` for it.

```
1 <class>\NeedsTeXFormat{LaTeX2e}
2 <*gobble>
3 \ProvidesFile{deutschesmuseum.dtx}
4 </gobble>
5 <class>\ProvidesClass{deutschesmuseum}
6 [2026/02/04 v1.7 Typesetting books for Deutsches Museum]
```

And the driver code:

```
7 <*gobble>
8 \documentclass{ltxdoc}
9 \usepackage{booktabs,tabularx}
10 \usepackage[breaklinks,colorlinks,linkcolor=black,citecolor=black,
11 pagecolor=black,urlcolor=black,hyperindex=false]{hyperref}
12 \PageIndex
13 \CodelineIndex
14 \RecordChanges
15 \EnableCrossrefs
16 \begin{document}
17   \DocInput{deutschesmuseum.dtx}
18 \end{document}
19 </gobble>
20 <*class>
```

### 6.2 Options

`\ifdeutschesmuseum@cfonts` First, let us decide whether we have non-free fonts:

```
21 \newif\ifdeutschesmuseum@cfonts
22 \deutschesmuseum@cfontstrue
23 \DeclareOption{cfonts}{\deutschesmuseum@cfontstrue}
24 \DeclareOption{nocfont}{\deutschesmuseum@cfontsfalse}
```

`\ifdeutschesmuseum@garamondmath` Whether we are using Garamond math

```
25 \newif\ifdeutschesmuseum@garamondmath
26 \deutschesmuseum@garamondmathtrue
27 \DeclareOption{garamondmath}{\deutschesmuseum@garamondmathtrue}
28 \DeclareOption{nogaramondmath}{\deutschesmuseum@garamondmathfalse}
```

`\ifdeutschesmuseum@folios` Whether we are using folios

```
29 \newif\ifdeutschesmuseum@folios
30 \deutschesmuseum@foliosfalse
31 \DeclareOption{folios}{\deutschesmuseum@foliostrue}
32 \DeclareOption{nofolios}{\deutschesmuseum@foliosfalse}
```

The size-changing options produce a warning:

```
33 \long\def\deutschesmuseum@size@warning#1{%
34   \ClassWarning{deutschesmuseum}{Size-changing option #1 will not be
```

```

35 honored}}%
36 \DeclareOption{8pt}{\deutschesmuseum@size@warning{\CurrentOption}}%
37 \DeclareOption{9pt}{\deutschesmuseum@size@warning{\CurrentOption}}%
38 \DeclareOption{10pt}{\deutschesmuseum@size@warning{\CurrentOption}}%
39 \DeclareOption{11pt}{\deutschesmuseum@size@warning{\CurrentOption}}%
40 \DeclareOption{12pt}{\deutschesmuseum@size@warning{\CurrentOption}}%

All other options are passed to amsart:
41 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{amsart}}
42 \ProcessOptions\relax

```

### 6.3 Loading Class and Packages

We start with the base class

```

43 \LoadClass{amsart}
44 \RequirePackage[breaklinks,colorlinks,linkcolor=black,citecolor=black,
45 pagecolor=black,urlcolor=black,hyperindex=false]{hyperref}
46 \RequirePackage{multicol}

```

### 6.4 Fonts

```

47 \usepackage{fontspec}
48 \ifdeutschesmuseum@cfonts
49 \setmainfont{GaramondBQ}[
50 Extension = .otf,
51 UprightFont = *-Regular,
52 BoldFont = *-Bold,
53 ItalicFont = *-Italic,
54 BoldItalicFont = *-MediumItalic]
55 \newfontfamily\FuturaPTLight{futura-pt_light}[
56 Extension = .otf,
57 UprightFont = *,
58 ItalicFont = *-oblique,
59 BoldFont = futura-pt_medium,
60 BoldItalicFont = futura-pt_medium-oblique]
61 \newfontfamily\FuturaPTMedium{futura-pt_medium}[
62 Extension = .otf,
63 UprightFont = *,
64 ItalicFont = *-oblique]
65 \newfontfamily\FuturaPTCondMedium{futura-pt_cond-medium}[
66 Extension = .otf,
67 UprightFont = *,
68 ItalicFont = *-oblique]
69 \newcommand{\foliofont}{\FuturaPTLight\fontsize{9pt}{11pt}\selectfont}
70 \newcommand{\hIfont}{\FuturaPTCondMedium\fontsize{14pt}{16pt}\selectfont}
71 \newcommand{\hIIIfont}{\FuturaPTCondMedium\fontsize{12.5pt}{12pt}\selectfont}
72 \newcommand{\hIIIfont}{\FuturaPTCondMedium\fontsize{12.5pt}{12pt}\selectfont}
73 \newcommand{\hIVfont}{\FuturaPTCondMedium\fontsize{11pt}{12pt}\selectfont}
74 \newcommand{\fnmarkfont}{\FuturaPTMedium\fontsize{10pt}{11pt}\selectfont}
75 \newcommand{\fnmarktextfont}{\FuturaPTMedium\fontsize{8pt}{10pt}\selectfont}
76 \newcommand{\fnfont}{\FuturaPTLight\fontsize{8pt}{10pt}\selectfont}
77 \else
78 \setmainfont{EBGaramond}[
79 Extension = .otf,

```

```

80 UprightFont = *-Regular,
81 BoldFont    = *-Bold,
82 ItalicFont  = *-Italic,
83 BoldItalicFont = *-BoldItalic]
84 \newfontfamily\LatoLight{Lato-Light}[
85 Extension = .ttf,
86 UprightFont = *,
87 ItalicFont = *Italic,
88 BoldFont = Lato-Medium,
89 BoldItalicFont = Lato-MediumItalic]
90 \newfontfamily\LatoMedium{Lato-Medium}[
91 Extension = .ttf,
92 UprightFont = *,
93 ItalicFont = *Italic]
94 \newcommand{\foliofont}{\LatoLight\fontsize{9pt}{11pt}\selectfont}
95 \newcommand{\hIfont}{\LatoMedium\fontsize{14pt}{16pt}\selectfont}
96 \newcommand{\hIIfont}{\LatoMedium\fontsize{12.5pt}{12pt}\selectfont}
97 \newcommand{\hIIIfont}{\LatoMedium\fontsize{11pt}{12pt}\selectfont}
98 \newcommand{\hIVfont}{\LatoMedium\fontsize{10pt}{12pt}\selectfont}
99 \newcommand{\fnmarkfont}{\LatoMedium\fontsize{10pt}{11pt}\selectfont}
100 \newcommand{\fnmarktextfont}{\LatoMedium\fontsize{8pt}{10pt}\selectfont}
101 \newcommand{\fnfont}{\LatoLight\fontsize{8pt}{10pt}\selectfont}
102 \fi
103 \let\bibfont\fnfont
104 \ifdeutschesmuseum@garamondmath
105 \RequirePackage[math-style=ISO, bold-style=ISO]{unicode-math}
106 \setmathfont{Garamond-Math.otf}[StylisticSet={7,9}]
107 \else
108 \RequirePackage{amssymb}
109 \fi

```

Font sizes. We redefine amsart ones

```

110 \def\@typesizes{%
111   \or{5}{6}\or{5}{6}\or{6}{7}\or{7}{8}\or{8}{10}%
112   \or{9.25}{11}% normalsize
113   \or{10}{12}\or{\@xipt}{13}\or{\@xiipt}{14}%
114   \or{\@xivpt}{17}\or{\@xvipt}{20}}%
115 \normalsize \linespacing=\baselineskip

```

## 7 Page dimensions and paragrphing

```

116 \usepackage[paperwidth=155mm, paperheight=220mm, includeheadfoot,
117 headheight=15pt, headsep=0.35in,
118 inner=20mm, outer=17mm, top=8.3mm, bottom=14.1mm]{geometry}
119 \setlength\parskip{0pt}
120 \setlength\parindent{5mm}
121 \renewcommand{\arraystretch}{0.9}
122 \renewenvironment{quotation}{\list{}}{%
123   \leftmargin5mm \listparindent\normalparindent
124   \itemindent\z@
125   \rightmargin\leftmargin \parsep\z@ \@plus\p@}%
126 \item[]%
127 }{%
128   \vspace\baselineskip
129 \endlist

```

```

130 }
131 \let\endquotation=\endlist % for efficiency
132 \renewenvironment{quote}{%
133   \list{}{\rightmargin5mm\leftmargin\rightmargin}\item[]%
134 }{%
135   \vspace\baselineskip
136   \endlist
137 }

```

## 8 Colors

We use DeutscheMuseumRed color

```

138 \RequirePackage{xcolor}
139 \definecolor{DeutschesMuseumRed}{cmyk}{0.36,0.87,0.61,0.33}

```

## 9 Front matter

`\subtitle` The subtitle

```

140 \newcommand\subtitle[1]{\def\@subtitle{#1}\def\shorttitle{#1}}
141 \subtitle{}

```

`\maketitle` And maketitle command

```

142 \renewcommand\maketitle{%
143   \@afterindentfalse
144   \ifx\@empty\shortauthors \let\shortauthors\shorttitle
145   \else \andify\shortauthors
146   \fi
147   \par
148   \@topnum\z@ % this prevents figures from falling at the top of page
149   \thispagestyle{firstpage}%
150   \ifx\@title\@empty
151   \else{\noindent\color{DeutschesMuseumRed}\hIfont\@title\par}\fi
152   \ifx\@subtitle\@empty\else
153     {\vspace\baselineskip\noindent\hIIfont\@subtitle\par}%
154   \fi
155   {\noindent\author\andify\authors\normalsize\normalfont\itshape\authors\vspace\baselineskip}
156   \@afterheading
157 }

```

`\abstract` Abstract is an unnumbered section divided from the body

```

158 \renewenvironment{abstract}{\par\vspace{2.5ex}\section*{\abstractname}}{}

```

### 9.1 Sectioning

`\section` The standard sectioning

```

159 \renewcommand\section{%
160   \@startsection{section}{1}{\z@}{-2\baselineskip}{\baselineskip}{\hIIIfont}}

```

`\subsection` The standard subsectioning

```

161 \renewcommand\subsection{%
162   \@startsection{subsection}{2}{\z@}{-\baselineskip}{1sp}{\hIVfont}}

```

## 10 Footnotes

```
\footnoterule We do not want rules
163 \def\footnoterule{}

\@makefnmark The footnote marker in the text
164 \def\@makefnmark{\textsuperscript{\color{DeutschesMuseumRed}\fnmarktextfont\@thefnmark}}

\@makefntext The text of a footnote
165 \def\@makefntext{\color{DeutschesMuseumRed}\fnmarktextfont\@thefnmark}\quad
166 \fnfont}
```

## 11 Page styles

```
167 \RequirePackage{fancyhdr}

Standard headers
168 \renewcommand{\headrulewidth}{0pt}
169 \renewcommand{\footrulewidth}{0pt}

First page style
170 \fancypagestyle{firstpage}{\fancyhf{}}%
171 \fancyhead[R0]{\ifdeutschesmuseum@folios\foliofont\thepage\fi}%
172 \fancyhead[LE]{\ifdeutschesmuseum@folios\foliofont\thepage\fi}%
173 }

And the standard page style
174 \fancypagestyle{standard}{%
175 \fancyhf{}}%
176 \fancyhead[R0]{\ifdeutschesmuseum@folios\foliofont\shorttitle\quad\thepage\fi}%
177 \fancyhead[LE]{\ifdeutschesmuseum@folios\foliofont\thepage\quad\shortauthors\fi}%
178 }
```

## 12 Floats

```
179 \RequirePackage{caption}
180 \DeclareCaptionFont{capfont}{\foliofont}
181 \captionsetup{font=capfont, textfont=capfont,
182 labelfont={capfont,bf}, labelsep=quad, justification=centering}
183 \captionsetup[figure]{name=Fig.}
184 \captionsetup[table]{name=Table, position=top}
```

## 13 Bibliography

```
We use natbib
185 \RequirePackage{natbib}

\cite Our citations are footnotes
186 \RenewDocumentCommand{\cite}{0{0}{m}}{\footnote{\citealt[#1][#2]{#3}}}}

And some redefinitions
187 \renewcommand\bibsection{}
188 \renewcommand\refname{Bibliography}
189 \def\bibpreamble{\setlength\multicolsep{\z@}\begin{multicols}{2}[\section*{\refname}]}
190 \def\bibcleanup{\vskip-\lastskip\end{multicols}}%
```



## 13.1 End of Class

```
191 \pagestyle{standard}  
192 \normalsize  
193 \normalfont  
194 \end{class}
```

## Change History

1.1			Nofolios option now suppresses running title as well . . . . .	4
	<code>\abstract:</code> Added abstract handling . . . . .	7		
			1.6	
	<code>\ifdeutschesmuseum@garamondmath:</code> Added option . . . . .	4	General: Remade captions . . . . .	8
1.2			<code>\abstract:</code> Added space before abstract . . . . .	7
	<code>\ifdeutschesmuseum@folios:</code> Added option . . . . .	4	Deleted space between abstract and the body . . . . .	7
1.3				
	<code>\abstract:</code> Abstract is now a normal unnumbered section . . . . .	7	1.7	
	<code>\ifdeutschesmuseum@folios:</code>		General: singleline check for captions . . . . .	8



<code>\linespacing</code> . . . . .	115		
<code>\list</code> . . . . .	122, 133		
<code>\listparindent</code> . . . . .	123		
<code>\LoadClass</code> . . . . .	43		
<code>\long</code> . . . . .	33		
		<b>M</b>	
<code>\maketitle</code> . . . . .	<u>142</u>		
<code>\multicolsep</code> . . . . .	189		
		<b>N</b>	
<code>\NeedsTeXFormat</code> . . . . .	1		
<code>\newcommand</code> . . . . .			
	. 69, 70, 71, 72,		
	73, 74, 75, 76,		
	94, 95, 96, 97,		
	98, 99, 100, 101, 140		
<code>\newfontfamily</code> . . . . .			
	. 55, 61, 65, 84, 90		
<code>\newif</code> . . . . .	21, 25, 29		
<code>nocfonts</code> (option) . . . . .	2		
<code>\noindent</code> . . . . .	151, 153, 155		
<code>\normalfont</code> . . . . .	155, 193		
<code>\normalparindent</code> . . . . .	123		
<code>\normalsize</code> . . . . .	115, 155, 192		
		<b>O</b>	
options:			
<code>cfonts</code> . . . . .	2		
<code>folios,nofolios</code> . . . . .	2		
<code>garamondmath,nogaramondmath</code> . . . . .	2		
<code>nocfonts</code> . . . . .	2		
<code>\or</code> . . . . .	111, 112, 113, 114		
		<b>P</b>	
<code>\p@</code> . . . . .	125		
<code>\PageIndex</code> . . . . .	12		
<code>\pagestyle</code> . . . . .	191		
<code>\par</code> . . . . .	147,		
	151, 153, 155, 158		
<code>\parindent</code> . . . . .	120		
<code>\parsep</code> . . . . .	125		
<code>\parskip</code> . . . . .	119		
<code>\PassOptionsToClass</code> . . . . .	41		
<code>\ProcessOptions</code> . . . . .	42		
<code>\ProvidesClass</code> . . . . .	5		
<code>\ProvidesFile</code> . . . . .	3		
		<b>Q</b>	
<code>\quad</code> . . . . .	165, 176, 177		
		<b>R</b>	
<code>\RecordChanges</code> . . . . .	14		
<code>\refname</code> . . . . .	188, 189		
<code>\relax</code> . . . . .	42		
<code>\renewcommand</code> . . . . .	121,		
	142, 159, 161,		
	168, 169, 187, 188		
<code>\RenewDocumentCommand</code> . . . . .	186		
<code>\renewenvironment</code> . . . . .	122, 132, 158		
<code>\RequirePackage</code> . . . . .	44, 46, 105, 108,		
	138, 167, 179, 185		
<code>\rightmargin</code> . . . . .	125, 133		
		<b>S</b>	
<code>\section</code> . . . . .	158, <u>159</u> , 189		
<code>\selectfont</code> . . . . .	69, 70, 71,		
	72, 73, 74, 75,		
	76, 94, 95, 96,		
	97, 98, 99, 100, 101		
<code>\setlength</code> . . . . .	119, 120, 189		
<code>\setmainfont</code> . . . . .	49, 78		
<code>\setmathfont</code> . . . . .	106		
<code>\shortauthors</code> . . . . .			
	. . . . . 144, 145, 177		
<code>\shorttitle</code> . . . . .	140, 144, 176		
<code>\subsection</code> . . . . .	<u>161</u>		
<code>\subtitle</code> . . . . .	2, <u>140</u>		
		<b>T</b>	
<code>\textsuperscript</code> . . . . .	164		
<code>\thepage</code> . . . . .			
	. 171, 172, 176, 177		
<code>\thispagestyle</code> . . . . .	149		
<code>\title</code> . . . . .	2		
		<b>U</b>	
<code>\usepackage</code> . . . . .	9, 10, 47, 116		
		<b>V</b>	
<code>\vskip</code> . . . . .	190		
<code>\vspace</code> . . . . .	128,		
	135, 153, 155, 158		
		<b>Z</b>	
<code>\z@</code> . . . . .	124, 125,		
	148, 160, 162, 189		