

# The file `greek.fdd` for use with L<sup>A</sup>T<sub>E</sub>X 2 <sub>$\varepsilon$</sub> .\*

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## 1 Introduction

The file ‘greek.fdd’ provides font definitions for typesetting greek texts. This version of the file has been updated, since now the official fonts for the `greek` option of the `babel` package are the `cb` fonts.

The font definition files produced from this documented source make the `cb` fonts compatible with both the Computer Modern collection (both CM and EC) and the Latin Modern one.

## 2 The `docstrip` modules

The following modules are used to direct `docstrip` in generating external files:

driver	produce a documentation driver file
LGRenc	The encoding definition file
LGRcmr	The Roman font shapes
LGRcmro	The Outline Roman font shapes
LGRcmss	The Sans Serif font shapes
LGRcmtt	The typewriter font shapes
LGRlcemss	The slide size Sans Serif font shapes
LGRlcemtt	The slide size typewriter fonts
LGRlmr	The Roman font shapes
LGRlmro	The Outline Roman font shapes
LGRlmss	The Sans Serif font shapes
LGRlmtt	The typewriter font shapes

A typical DOCSTRIP command file would then have entries like:

```
\generateFile{lgrcmr.fd}{t}{\from{greek.fdd}{fd,LGRcmr}}
```

## 3 The encoding definition file

This file defines the fontencoding `LGR` for greek text. Moreover, it provides the `\EC@family` macro, since the Greek fonts have the same naming conventions as the Latin ones produced by Jörg Knappen that are now the official fonts of L<sup>A</sup>T<sub>E</sub>X 2 <sub>$\varepsilon$</sub> . It also makes some definitions to ensure that commands such as `\TeX`, `\copyright` give “expected results” (`\TeX`, ©).

```
1 (*LGRenc)
2 \DeclareFontEncoding{LGR}{}{}
3 \DeclareFontSubstitution{LGR}{cmr}{m}{n}
4 \DeclareErrorFont{LGR}{cmr}{m}{n}{10}
```

---

\*This file has version number v2.3, dated 2008/06/17.

First we define a few commands in the LGR encoding.

```

5 \ProvideTextCommand{\textcopyright}{LGR}{%
6   \textcircled{\textlatin{c}}}
7 \ProvideTextCommand{\textregistered}{LGR}{%
8   \textcircled{\textlatin{\textsc r}}}
9 \ProvideTextCommand{\texttrademark}{LGR}{%
10  \textsuperscript{\textlatin{TM}}}
11 \ProvideTextCommand{\SS}{LGR}{%
12  \textlatin{SS}}
13 
```

## 4 The font definition files

In the previous release of the greek option we used the `kd` family of fonts, which were made by K.J. Dryllerakis. Now, we have switched to the `cb` fonts by Claudio Beccari, mainly because these fonts are complete, in any sense of the word, and moreover fit nicely with the Computer Modern font family.

We begin with the definitions for the Greek Computer Modern fonts.

```

14 {*LGRcmr}
15 \providecommand{\EC@family}[5]{%
16   \DeclareFontShape{\#1}{\#2}{\#3}{\#4}{%
17     <5><6><7><8><9><10><10.95><12><14.4>%
18     <17.28><20.74><24.88><29.86><35.83>genb##5}{}}%
19 \DeclareFontFamily{LGR}{cmr}{}%
20 \EC@family{LGR}{cmr}{m}{n} {grmn}%
21 \EC@family{LGR}{cmr}{m}{sl} {grmo}%
22 \EC@family{LGR}{cmr}{m}{it} {grmi}%
23 \EC@family{LGR}{cmr}{m}{sc} {grmc}%
24 \EC@family{LGR}{cmr}{m}{ui} {grmu}%
25 \EC@family{LGR}{cmr}{m}{li} {grml}%
26 \EC@family{LGR}{cmr}{m}{rs} {gmmn}%
27 \EC@family{LGR}{cmr}{m}{ro} {gmmo}%
28 %
29 \EC@family{LGR}{cmr}{bx}{sc} {grxc}%
30 \EC@family{LGR}{cmr}{bx}{n} {grxn}%
31 \EC@family{LGR}{cmr}{bx}{sl} {grxo}%
32 \EC@family{LGR}{cmr}{bx}{it} {grxi}%
33 \EC@family{LGR}{cmr}{bx}{ui} {grxu}%
34 \EC@family{LGR}{cmr}{bx}{li} {grxl}%
35 \EC@family{LGR}{cmr}{bx}{rs} {gmxn}%
36 \EC@family{LGR}{cmr}{bx}{ro} {gmxo}%
37 \EC@family{LGR}{cmr}{b}{li} {grbl}%
38 \DeclareFontShape{LGR}{cmr}{b}{n}{%
39   <->ssub*cmr/bx/n}{}}%
40 \DeclareFontShape{LGR}{cmr}{b}{sc}{%
41   <->ssub*cmr/bx/sc}{}}%
42 
```

The greek outline family is now complete with the same five shapes and the two series as the roman family.

```

43 {*LGRcmro}
44 \providecommand{\EC@family}[5]{%
45   \DeclareFontShape{\#1}{\#2}{\#3}{\#4}{%
46     <5><6><7><8><9><10><10.95><12><14.4>%
47     <17.28><20.74><24.88><29.86><35.83>genb##5}{}}%
48 \DeclareFontFamily{LGR}{cmro}{}%
49 \EC@family{LGR}{cmro}{m}{n} {gomn}%
50 \EC@family{LGR}{cmro}{m}{sl} {gomo}%
51 \EC@family{LGR}{cmro}{m}{it} {gomii}%
52 \EC@family{LGR}{cmro}{m}{sc} {gomci}%
53 \EC@family{LGR}{cmro}{m}{ui} {gomou}%

```

```

54 \EC@family{LGR}{cmro}{bx}{sc}  {goxc}
55 \EC@family{LGR}{cmro}{bx}{n}    {goxn}
56 \EC@family{LGR}{cmro}{bx}{sl}   {goxo}
57 \EC@family{LGR}{cmro}{bx}{it}   {goxi}
58 \EC@family{LGR}{cmro}{bx}{ui}   {goxu}
59 \DeclareFontShape{LGR}{cmro}{b}{n}
60           {<->ssub*cmro/bx/n}{}
61 \DeclareFontShape{LGR}{cmro}{b}{sc}
62           {<->ssub*cmro/bx/sc}{}
63 
```

Then we have the typewriter fonts...

```

64 (*LGRcmtt)
65 \providecommand{\EC@family}[5]{%
66   \DeclareFontShape{#1}{#2}{#3}{#4}
67   {<5><6><7><8><9><10><10.95><12><14.4>%
68   <17.28><20.74><24.88><29.86><35.83>genb##5}{}
69 \DeclareFontFamily{LGR}{cmtt}{\hyphenchar\font\m@ne}\hyphenchar = -1
70 \EC@family{LGR}{cmtt}{m}{n}    {gttn}
71 \EC@family{LGR}{cmtt}{m}{sl}   {gtto}
72 \EC@family{LGR}{cmtt}{m}{sc}   {gttc}
73 \EC@family{LGR}{cmtt}{m}{it}   {gtti}
74 \EC@family{LGR}{cmtt}{m}{ui}   {gttu}
75 \DeclareFontShape{LGR}{cmtt}{bx}{n}
76           {<->ssub*cmtt/m/n}{}
77 \DeclareFontShape{LGR}{cmtt}{bx}{sl}
78           {<->ssub*cmtt/m/sl}{}
79 \DeclareFontShape{LGR}{cmtt}{bx}{it}
80           {<->ssub*cmtt/m/it}{}
81 \DeclareFontShape{LGR}{cmtt}{bx}{sc}
82           {<->ssub*cmtt/m/sc}{}
83 \DeclareFontShape{LGR}{cmtt}{bx}{ui}
84           {<->ssub*cmtt/m/ui}{}
85 
```

Now we come to the Sans Serif font to be used in greek texts.

```

86 (*LGRcmss)
87 \providecommand{\EC@family}[5]{%
88   \DeclareFontShape{#1}{#2}{#3}{#4}
89   {<5><6><7><8><9><10><10.95><12><14.4>%
90   <17.28><20.74><24.88><29.86><35.83>genb##5}{}
91 \DeclareFontFamily{LGR}{cmss}{}
92 \EC@family{LGR}{cmss}{m}{n}    {gsmn}
93 \EC@family{LGR}{cmss}{m}{sl}   {gsmo}
94 \EC@family{LGR}{cmss}{m}{sc}   {gsmc}
95 \EC@family{LGR}{cmss}{m}{it}   {gsmi}
96 \EC@family{LGR}{cmss}{m}{ui}   {gsmu}
97 \EC@family{LGR}{cmss}{m}{iv}   {gsme}
98 \EC@family{LGR}{cmss}{m}{uv}   {gsma}
99 %
100 \EC@family{LGR}{cmss}{bx}{n}   {gsxn}
101 \EC@family{LGR}{cmss}{bx}{sl}  {gsxo}
102 \EC@family{LGR}{cmss}{bx}{sc}  {gsxc}
103 \EC@family{LGR}{cmss}{bx}{it}  {gsxi}
104 \EC@family{LGR}{cmss}{bx}{ui}  {gsxu}
105 \EC@family{LGR}{cmss}{bx}{iv}  {gsxe}
106 \EC@family{LGR}{cmss}{bx}{uv}  {gsxa}
107 
```

We have finished with the “regular” fonts. We now provide the fonts definition files for the fonts used only in slides. First comes the typewriter font.

```

108 (*LGRlcmtt)
109 \DeclareFontFamily{LGR}{lcmtt}{\hyphenchar\font\m@ne}
```

```

110 \DeclareFontShape{LGR}{lcmtt}{m}{n}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
111 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
112 genb * gltn}{}%
113 \DeclareFontShape{LGR}{lcmtt}{m}{In}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
114 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
115 genb * gljn}{}%
116 \DeclareFontShape{LGR}{lcmtt}{m}{it}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
117 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
118 genb * glto}{}%
119 \DeclareFontShape{LGR}{lcmtt}{m}{IIt}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
120 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
121 genb * gljo}{}%
122 \DeclareFontShape{LGR}{lcmtt}{m}{s1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
123 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
124 ssub * lcmtt/m/it}{}%
125 \DeclareFontShape{LGR}{lcmtt}{m}{Is1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
126 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
127 ssub * lcmtt/m/Iit}{}%
128 \DeclareFontShape{LGR}{lcmtt}{m}{sc}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
129 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
130 genb * gltc}{}%
131 \DeclareFontShape{LGR}{lcmtt}{m}{Isc}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
132 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
133 genb * gljc}{}%
134 (/LGRlcmtt)

```

And then the Sans Serif font.

```

135 (*LGRlcms)
136 \DeclareFontFamily{LGR}{lcms}{}%
137 \DeclareFontShape{LGR}{lcms}{m}{n}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
138 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
139 genb * glmn}{}%
140 \DeclareFontShape{LGR}{lcms}{m}{In}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
141 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
142 genb * glin}{}%
143 \DeclareFontShape{LGR}{lcms}{m}{s1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
144 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
145 genb * glmo}{}%
146 \DeclareFontShape{LGR}{lcms}{m}{Is1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
147 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
148 genb * glio}{}%
149 \DeclareFontShape{LGR}{lcms}{m}{it}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
150 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
151 genb * glmi}{}%
152 \DeclareFontShape{LGR}{lcms}{m}{IIt}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
153 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
154 genb * glii}{}%
155 \DeclareFontShape{LGR}{lcms}{m}{ui}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
156 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
157 genb * glmu}{}%
158 \DeclareFontShape{LGR}{lcms}{m}{bx}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
159 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
160 genb * glxn}{}%
161 \DeclareFontShape{LGR}{lcms}{m}{bx}{In}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
162 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
163 genb * glwn}{}%
164 \DeclareFontShape{LGR}{lcms}{m}{bx}{s1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
165 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
166 genb * glxo}{}%
167 \DeclareFontShape{LGR}{lcms}{m}{bx}{Is1}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
168 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
169 genb * glwo}{}%
170 \DeclareFontShape{LGR}{lcms}{m}{it}%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

```

171 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
172 genb * glxi}{}
173 \DeclareFontShape{LGR}{lcmss}{bx}{Iit}{%
174 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
175 genb * glwi}{}
176 \DeclareFontShape{LGR}{lcmss}{m}{sc}{%
177 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
178 genb * glmc}{}
179 \DeclareFontShape{LGR}{lcmss}{m}{Isc}{%
180 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
181 genb * glic}{}
182 \DeclareFontShape{LGR}{lcmss}{bx}{sc}{%
183 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
184 genb * glxc}{}
185 \DeclareFontShape{LGR}{lcmss}{bx}{Isc}{%
186 <7><8><10><12><13.82><16.59><19.91><23.89><28.66><34.4><41.28>
187 genb * glwc}{}
188 
```

And now come the font definition files compatible with the Latin Modern family names and sizes; notice that the Latin Modern fonts are available only as scalable PostScript fonts, therefore they cope with continuous scaling; also the `cb` fonts are distributed as scalable PostScript fonts, so it makes sense to use the same size and family specifications as the LM fonts.

We start with the Latin Modern Regular.

```

189 <*>LGRlmr>
190 \DeclareFontFamily{LGR}{lmr}{}
191 \DeclareFontShape{LGR}{lmr}{m}{n}{%
192   <-5.5> grmn0500 <5.5-6.5> grmn0600
193   <6.5-7.5> grmn0700 <7.5-8.5> grmn0800
194   <8.5-9.5> grmn0900 <9.5-11> grmn1000
195   <11-15> grmn1200 <15-> grmn1728}{}
196 \DeclareFontShape{LGR}{lmr}{m}{rs}{%
197   <-5.5> gmmn0500 <5.5-6.5> gmmn0600
198   <6.5-7.5> gmmn0700 <7.5-8.5> gmmn0800
199   <8.5-9.5> gmmn0900 <9.5-11> gmmn1000
200   <11-15> gmmn1200 <15-> gmmn1728}{}
201 \DeclareFontShape{LGR}{lmr}{m}{s1}{%
202   <-8.5> grmo0800 <8.5-9.5> grmo0900
203   <9.5-11> grmo1000 <11-15> grmo1200
204   <15-> grmo1728}{}
205 \DeclareFontShape{LGR}{lmr}{m}{ro}{%
206   <-8.5> gmmo0800 <8.5-9.5> gmmo0900
207   <9.5-11> gmmo1000 <11-15> gmmo1200
208   <15-> gmmo1728}{}
209 \DeclareFontShape{LGR}{lmr}{m}{it}{%
210   <-7.5> grmi0700
211   <7.5-8.5> grmi0800 <8.5-9.5> grmi0900
212   <9.5-11> grmi1000 <11-15> grmi1200
213   <15-> grmi1728}{}
214 \DeclareFontShape{LGR}{lmr}{m}{li}{%
215   <-7.5> grml0700
216   <7.5-8.5> grml0800 <8.5-9.5> grml0900
217   <9.5-11> grml1000 <11-15> grml1200
218   <15-> grml1728}{}
219 \DeclareFontShape{LGR}{lmr}{m}{ui}{%
220   <-7.5> grmu0700
221   <7.5-8.5> grmu0800 <8.5-9.5> grmu0900
222   <9.5-11> grmu1000 <11-15> grmu1200
223   <15-> grmu1728}{}
224 \DeclareFontShape{LGR}{lmr}{m}{sc}{%
225   <-7.5> grmc0700
226   <7.5-8.5> grmc0800 <8.5-9.5> grmc0900

```

```

227      <9.5-11> grmc1000   <11-15>     grmc1200
228      <15->      grmc1728}{}
229 % slanted CSC is changed to unslanted CSC
230 \DeclareFontShape{LGR}{lmr}{m}{scs1}{%
231   {<-> ssub*lmr/m/sc}{}
232 %%%%%%%%%% bold and bold extended series
233 \DeclareFontShape{LGR}{lmr}{bx}{n}{%
234   {<-5.5>    grxn0500    <5.5-6.5> grx0600
235   <6.5-7.5> grxn0700    <7.5-8.5> grxn0800
236   <8.5-9.5> grxn0900    <9.5-11> grxn1000
237   <11-15>    grxn1200    <15->      grxn1728}{}
238 \DeclareFontShape{LGR}{lmr}{bx}{rs}{%
239   {<-5.5>    gmxn0500    <5.5-6.5> gmx0600
240   <6.5-7.5> gmxn0700    <7.5-8.5> gmxn0800
241   <8.5-9.5> gmxn0900    <9.5-11> gmxn1000
242   <11-15>    gmxn1200    <15->      gmxn1728}{}
243 \DeclareFontShape{LGR}{lmr}{bx}{it}{%
244   {<-7.5>    grxi0700
245   <7.5-8.5> grxi0800    <8.5-9.5> grxi0900
246   <9.5-11> grxi1000    <11-15> grxi1200
247   <15->      grxi1728}{}
248 \DeclareFontShape{LGR}{lmr}{bx}{li}{%
249   {<-7.5>    grbl0700
250   <7.5-8.5> grbl0800    <8.5-9.5> grbl0900
251   <9.5-11> grbl1000    <11-15> grbl1200
252   <15->      grbl1728}{}
253 \DeclareFontShape{LGR}{lmr}{bx}{li}{%
254   {<-7.5>    grxl0700
255   <7.5-8.5> grxl0800    <8.5-9.5> grxl0900
256   <9.5-11> grxl1000    <11-15> grxl1200
257   <15->      grxl1728
258   }{}}
259 \DeclareFontShape{LGR}{lmr}{bx}{ui}{%
260   {<-7.5>    grxu0700
261   <7.5-8.5> grxu0800    <8.5-9.5> grxu0900
262   <9.5-11> grxu1000    <11-15> grxu1200
263   <15->      grxu1728}{}
264 \DeclareFontShape{LGR}{lmr}{bx}{sl}{%
265   {<-8.5>    grxo0800    <8.5-9.5> grxo0900
266   <9.5-11> grxo1000    <11-15> grxo1200
267   <15->      grxo1728}{}
268 \DeclareFontShape{LGR}{lmr}{bx}{ro}{%
269   {<-8.5>    gmxo0800    <8.5-9.5> gmxo0900
270   <9.5-11> gmxo1000    <11-15> gmxo1200
271   <15->      gmxo1728}{}
272 \DeclareFontShape{LGR}{lmr}{bx}{sc}{%
273   {<-7.5>    grxc0700
274   <7.5-8.5> grxc0800    <8.5-9.5> grxc0900
275   <9.5-11> grxc1000    <11-15> grxc1200
276   <15->      grxc1728}{}
277 </LGRlmr>

```

Then the Latin Modern Regular Outline

```

278 (*LGRlmro)
279 \DeclareFontFamily{LGR}{lmro}{}
280 \DeclareFontShape{LGR}{lmro}{m}{n}{%
281   {<-5.5>    gomn0500    <5.5-6.5> gomn0600
282   <6.5-7.5> gomn0700    <7.5-8.5> gomn0800
283   <8.5-9.5> gomn0900    <9.5-11> gomn1000
284   <11-15>    gomn1200    <15->      gmr1728}{}
285 \DeclareFontShape{LGR}{lmro}{m}{sl}{%
286   {<-8.5>    gomo0800    <8.5-9.5> gomo0900
287   <9.5-11> gomo1000    <11-15> gomo1200

```

```

288      <15->      gomo1728(){}
289 \DeclareFontShape{LGR}{lmro}{m}{it}%
290   {<-7.5>      gomi0700
291     <7.5-8.5> gomi0800    <8.5-9.5> gomi0900
292     <9.5-11> gomi1000   <11-15>    gomi1200
293     <15->      gomi1728){}
294 \DeclareFontShape{LGR}{lmro}{m}{ui}%
295   {<-7.5>      gomu0700
296     <7.5-8.5> gomu0800    <8.5-9.5> gomu0900
297     <9.5-11> gomu1000   <11-15>    gomu1200
298     <15->      gomu1728){}
299 \DeclareFontShape{LGR}{lmro}{m}{sc}%
300   {<-7.5>      gomc0700
301     <7.5-8.5> gomc0800    <8.5-9.5> gomc0900
302     <9.5-11> gomc1000   <11-15>    gomc1200
303     <15->      gomc1728){}
304 % slanted CSC is changed to unslanted CSC
305 \DeclareFontShape{LGR}{lmro}{m}{scs1}%
306   {<-> ssub*lmr/m/sc}{}
307 %%%%%%%%% bold extended series
308 \DeclareFontShape{LGR}{lmro}{bx}{n}%
309   {<-5.5>      goxn0500    <5.5-6.5> gox0600
310     <6.5-7.5> goxn0700    <7.5-8.5> goxn0800
311     <8.5-9.5> goxn0900    <9.5-11> goxn1000
312     <11-15>    goxn1200   <15->      goxn1728){}
313 \DeclareFontShape{LGR}{lmro}{bx}{it}%
314   {<-7.5>      goxi0700
315     <7.5-8.5> goxi0800    <8.5-9.5> goxi0900
316     <9.5-11> goxi1000   <11->      goxi1200
317     <15->      goxi1728){}
318 \DeclareFontShape{LGR}{lmro}{bx}{ui}%
319   {<-7.5>      goxu0700
320     <7.5-8.5> goxu0800    <8.5-9.5> goxu0900
321     <9.5-11> goxu1000   <11->      goxu1200
322     <15->      goxu1728){}
323 \DeclareFontShape{LGR}{lmro}{bx}{sl}%
324   {<-8.5>      goxo0800    <8.5-9.5> goxo0900
325     <9.5-11> goxo1000   <11-15>    goxo1200
326     <15->      goxo1728){}
327 \DeclareFontShape{LGR}{lmro}{bx}{sc}%
328   {<-7.5>      goxc0700
329     <7.5-8.5> goxc0800    <8.5-9.5> goxc0900
330     <9.5-11> goxc1000   <11-15>    goxc1200
331     <15->      goxc1728){}
332 
```

Now the Latin Modern Sans Serif

```

333 (*LGRlmss)
334 \DeclareFontFamily{LGR}{lmss}{}
335 \DeclareFontShape{LGR}{lmss}{m}{n}%
336   {<-8.5>      gsmn0800
337     <8.5-9.5> gsmn0900    <9.5-11>  gsmn1000
338     <11-15.5> gsmn1200   <15.5->   gsmn1728){}
339 \DeclareFontShape{LGR}{lmss}{m}{it}%
340   {<-8.5>      gsmi0800
341     <8.5-9.5> gsmi0900    <9.5-11>  gsmi1000
342     <11-15.5> gsmi1200   <15.5->   gsmi1728){}
343 \DeclareFontShape{LGR}{lmss}{m}{iv}%
344   {<-8.5>      gsme0800
345     <8.5-9.5> gsme0900    <9.5-11>  gsme1000
346     <11-15.5> gsme1200   <15.5->   gsme1728){}
347 \DeclareFontShape{LGR}{lmss}{m}{ui}%
348   {<-8.5>      gsmu0800

```

```

349      <8.5-9.5> gsmu0900      <9.5-11>  gsmu1000
350      <11-15.5> gsmu1200      <15.5->   gsmu1728){}
351 \DeclareFontShape{LGR}{lmss}{m}{uv}
352     {<-8.5>    gsma0800
353     <8.5-9.5> gsma0900      <9.5-11>  gsma1000
354     <11-15.5> gsma1200      <15.5->   gsma1728){}
355 \DeclareFontShape{LGR}{lmss}{m}{sl}
356     {<-8.5>    gsmo0800
357     <8.5-9.5> gsmo0900      <9.5-11>  gsmo1000
358     <11-15.5> gsmo1200      <15.5->   gsmo1728){}
359 \DeclareFontShape{LGR}{lmss}{m}{sc}
360     {<-8.5>    gsmc0800
361     <8.5-9.5> gsmc0900      <9.5-11>  gsmc1000
362     <11-15.5> gsmc1200      <15.5->   gsmc1728){}
363 %%%%%%%%%% semibold condensed series substituted with medium series
364 \DeclareFontShape{LGR}{lmss}{sbc}{n}
365 {<-> ssub*lmss/m/n}{}
366 \DeclareFontShape{LGR}{lmss}{sbc}{sl}
367 {<-> ssub*/lmss/m/sl}{}
368 \DeclareFontShape{LGR}{lmss}{sbc}{it}
369 {<->ssub*lmss/m/sl}{}
370 %%%%%%%%%% bold extended series
371 \DeclareFontShape{LGR}{lmss}{bx}{n}
372     {<-8.5>    gsxn0800
373     <8.5-9.5> gsxn0900      <9.5-11>  gsxn1000
374     <11-15.5> gsxn1200      <15.5->   gsxn1728){}
375 \DeclareFontShape{LGR}{lmss}{bx}{sl}
376     {<-8.5>    gsxo0800
377     <8.5-9.5> gsxo0900      <9.5-11>  gsxo1000
378     <11-15.5> gsxo1200      <15.5->   gsxo1728){}
379 \DeclareFontShape{LGR}{lmss}{bx}{it}
380     {<-8.5>    gsxi0800
381     <8.5-9.5> gsxi0900      <9.5-11>  gsxi1000
382     <11-15.5> gsxi1200      <15.5->   gsxi1728){}
383 \DeclareFontShape{LGR}{lmss}{bx}{iv}
384     {<-8.5>    gsxe0800
385     <8.5-9.5> gsxe0900      <9.5-11>  gsxe1000
386     <11-15.5> gsxe1200      <15.5->   gsxe1728){}
387 \DeclareFontShape{LGR}{lmss}{bx}{ui}
388     {<-8.5>    gsxu0800
389     <8.5-9.5> gsxu0900      <9.5-11>  gsxu1000
390     <11-15.5> gsxu1200      <15.5->   gsxu1728){}
391 \DeclareFontShape{LGR}{lmss}{bx}{uv}
392     {<-8.5>    gsxa0800
393     <8.5-9.5> gsxa0900      <9.5-11>  gsxa1000
394     <11-15.5> gsxa1200      <15.5->   gsxa1728){}
395 \DeclareFontShape{LGR}{lmss}{bx}{sc}
396     {<-8.5>    gsxc0800
397     <8.5-9.5> gsxc0900      <9.5-11>  gsxc1000
398     <11-15.5> gsxc1200      <15.5->   gsxc1728){}
399 
```

And finally the Latin Modern typewriter font.

```

400 {*LGRlmtt}
401 \DeclareFontFamily{LGR}{lmtt}{\hyphenchar\font\m@ne}
402 \DeclareFontShape{LGR}{lmtt}{m}{n}
403     {<-8.5>    gttn0800      <8.5-9.5> gttn0900
404     <9.5-11> gttn1000      <11-15>    gttn1200
405     <15->     gttn1728){}
406 \DeclareFontShape{LGR}{lmtt}{m}{it}
407     {<-> ssub*lgr/lmtt/m/sl}{}
408 \DeclareFontShape{LGR}{lmtt}{m}{sl}
409     {<-8.5>    gtto0800      <8.5-9.5> gtto0900

```

```

410      <9.5-11> gtto1000    <11-15>     gtto1200
411      <15->      gtto1728}{}
412 \DeclareFontShape{LGR}{lmtt}{m}{sc}
413      {<-8.5>   gttc0800    <8.5-9.5> gttc0900
414      <9.5-11> gttc1000    <11-15>     gttc1200
415      <15->      gttc1728}{}
416 % shape undefined, substituted with unslanted
417 \DeclareFontShape{LGR}{lmtt}{m}{scsl}{<-> ssub*lmtt/m/sc}{}
418 </LGRlmtt>

```

The slide fonts have not been mapped to the Latin Modern families and sizes, because there are no slide fonts in the LM collection. Moreover nowadays the traditional slide fonts are very seldom used, since slides are produced with other classes different from the class `slides`, and they use different fonts.

The next line goes into all files and in addition prevents `DOCSTRIP` from adding any further code from the main source file (such as a character table).

```
419 \endinput
```