

# Using Chivo fonts with LaTeX\*

Arash Esbati

2016/05/05

## Abstract

This package provides the necessary files to use the Chivo fonts with LaTeX. Chivo is a set of eight fonts provided by Héctor Gatti & Omnibus-Type Team under the Open Font License (OFL).

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Installation</b>	<b>2</b>
<b>3</b>	<b>Usage</b>	<b>2</b>
3.1	Engine independent options . . . . .	2
3.2	(pdf)LaTeX specific option . . . . .	3
3.3	XeLaTeX and LuaLaTeX specific options . . . . .	3
<b>4</b>	<b>OT1 encoding font table</b>	<b>4</b>
<b>5</b>	<b>LY1 encoding font table</b>	<b>5</b>
<b>6</b>	<b>T1 encoding font table</b>	<b>6</b>
<b>7</b>	<b>TS1 encoding font table</b>	<b>7</b>
<b>8</b>	<b>Text samples</b>	<b>8</b>
<b>9</b>	<b>Implementation</b>	<b>12</b>
9.1	Chivo.sty . . . . .	12

---

\*This file has version number v1.0, last revised 2016/05/05.

# 1 Introduction

Chivo<sup>1</sup> is a set of eight fonts created by Héctor Gatti & Omnibus-Type Team and provided by Omnibus-Type under the SIL Open Font License, Version 1.1. From the web page:

“Chivo is a grotesque typeface. The strength of Chivo makes it ideal for highlights and headlines. Chivo Regular's elegance is ideal for combining with Chivo Black's strength and for continuous reading settings.”

The fonts were obtained from Omni-Type web page<sup>2</sup>. (v1.003, 8 fonts, 335 glyphs each).

# 2 Installation

I suggest you use MikTeX or TeXlive and wait until the fonts are distributed for your TeX installation via their package manager.

# 3 Usage

The fonts can be used with traditional (pdf)TeX engine and newer XeTeX and LuaTeX engines which can access OTF fonts directly. They are described below. In general, this bundle tries not to be smart and loads only `kvoptions.sty`, `mweights.sty` or `fontspec.sty`, depending on the used engine. As the result, some work must be done by the user.

## 3.1 Engine independent options

A package `Chivo.sty` is provided which can be loaded in the preamble as usual:

```
\usepackage{Chivo}
```

Loading the package changes the document's sans serif font to Chivo. The package offers some options.

regular | light

The default font series is set with one of `regular` or `light` – `regular` is the default. Note that these options are defined as complementary ones. Setting one option to ‘false’ sets the other one automatically to ‘true’, i.e.

```
\usepackage[regular = false]{Chivo}  
or  
\usepackage[light = true] {Chivo}
```

have the same effect.

bold | black

The default bold series is set with one of `bold` or `black` – `bold` is the default. Again, these options are complementary as well.

familydefault

The main font of a document can be switched to Chivo with package option `familydefault` or `familydefault=true`, e.g.:

- 
1. Copyright © 2011–2015, Omnibus-Type (<http://www.omnibus-type.com>)
  2. <http://omnibus-type.com/fonts/chivo.php>

```
\usepackage[familydefault]{Chivo}

opentype | type1 If the automatic engine detection fails, it can be specified by the user with
one of opentype or type1. Note that these option do not take a boolean value
true or false.
```

### 3.2 (pdf)TeX specific option

scale The size of the Chivo fonts can be adjusted with the scale option, e.g.:

```
\usepackage[scale=0.97]{Chivo}
```

OT1, LY1, T1 and TS1 encodings are supported. Chivo.sty does not load the respective packages, it is up to user to load them, e.g.:

```
\usepackage[T1]{fontenc}
\usepackage{Chivo}
\usepackage{textcomp}
```

### 3.3 XeTeX and LuaTeX specific options

These engines can access OTF fonts directly. The standard interface for this purpose is `fontspec.sty`<sup>3</sup>. Chivo.sty detects if XeTeX or LuaTeX is used and based on options given by regular|light and/or bold|black, it uses \defaultfeature to define Chivo and passes it to \setsansfont, e.g.:

```
\defaultfontfeatures[Chivo]
{
    Extension      = .otf          ,
    BoldFont       = Chivo-Black   ,
    ItalicFont     = Chivo-LightItalic ,
    BoldItalicFont = Chivo-BlackItalic ,
    UprightFont    = Chivo-Light
}
\AtBeginDocument{\setsansfont{Chivo}}
```

The scale package option does not work with `fontspec.sty`. This and any other `fontspec.sty` option can be set with \defaultfeature+, e.g.:

```
\usepackage{fontspec}
\usepackage{Chivo}
\defaultfontfeatures+[Chivo]
{
    Ligatures = TeX          ,
    Scale     = MatchLowercase ,
    Color     = blue
}
```

---

3. <http://ctan.org/pkg/fontspec>

## 4 OT1 encoding font table

	‘0	‘1	‘2	‘3	‘4	‘5	‘6	‘7	
‘00x	0	Δ <sub>1</sub>	2	3	4	5	6	7	~0x
‘01x	8	9	Ω <sub>10</sub>	11	12	13	14	15	
‘02x	I <sub>16</sub>	J <sub>17</sub>	‘18	‘19	‘20	‘21	‘22	‘23	~1x
‘03x	, <sub>24</sub>	β <sub>25</sub>	æ <sub>26</sub>	œ <sub>27</sub>	ø <sub>28</sub>	Æ <sub>29</sub>	Œ <sub>30</sub>	Ø <sub>31</sub>	
‘04x	! <sub>32</sub>	! <sub>33</sub>	” <sub>34</sub>	# <sub>35</sub>	\$ <sub>36</sub>	% <sub>37</sub>	& <sub>38</sub>	’ <sub>39</sub>	~2x
‘05x	( <sub>40</sub>	) <sub>41</sub>	* <sub>42</sub>	+ <sub>43</sub>	, <sub>44</sub>	- <sub>45</sub>	. <sub>46</sub>	/ <sub>47</sub>	
‘06x	0 <sub>48</sub>	1 <sub>49</sub>	2 <sub>50</sub>	3 <sub>51</sub>	4 <sub>52</sub>	5 <sub>53</sub>	6 <sub>54</sub>	7 <sub>55</sub>	~3x
‘07x	8 <sub>56</sub>	9 <sub>57</sub>	: <sub>58</sub>	; <sub>59</sub>	j <sub>60</sub>	= <sub>61</sub>	č <sub>62</sub>	? <sub>63</sub>	
‘10x	@ <sub>64</sub>	A <sub>65</sub>	B <sub>66</sub>	C <sub>67</sub>	D <sub>68</sub>	E <sub>69</sub>	F <sub>70</sub>	G <sub>71</sub>	~4x
‘11x	H <sub>72</sub>	I <sub>73</sub>	J <sub>74</sub>	K <sub>75</sub>	L <sub>76</sub>	M <sub>77</sub>	N <sub>78</sub>	O <sub>79</sub>	
‘12x	P <sub>80</sub>	Q <sub>81</sub>	R <sub>82</sub>	S <sub>83</sub>	T <sub>84</sub>	U <sub>85</sub>	V <sub>86</sub>	W <sub>87</sub>	~5x
‘13x	X <sub>88</sub>	Y <sub>89</sub>	Z <sub>90</sub>	[ <sub>91</sub>	“ <sub>92</sub>	] <sub>93</sub>	^ <sub>94</sub>	· <sub>95</sub>	
‘14x	‘ <sub>96</sub>	a <sub>97</sub>	b <sub>98</sub>	c <sub>99</sub>	d <sub>100</sub>	e <sub>101</sub>	f <sub>102</sub>	g <sub>103</sub>	~6x
‘15x	h <sub>104</sub>	i <sub>105</sub>	j <sub>106</sub>	k <sub>107</sub>	l <sub>108</sub>	m <sub>109</sub>	n <sub>110</sub>	o <sub>111</sub>	
‘16x	p <sub>112</sub>	q <sub>113</sub>	r <sub>114</sub>	s <sub>115</sub>	t <sub>116</sub>	u <sub>117</sub>	v <sub>118</sub>	w <sub>119</sub>	~7x
‘17x	x <sub>120</sub>	y <sub>121</sub>	z <sub>122</sub>	— <sub>123</sub>	— <sub>124</sub>	“ <sub>125</sub>	~ <sub>126</sub>	“ <sub>127</sub>	
‘20x	fi <sub>128</sub>	fl <sub>129</sub>	130	131	132	133	134	135	~8x
‘21x	136	137	138	139	140	141	142	143	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 5 LY1 encoding font table

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	fi <sub>0</sub>	€ <sub>1</sub>	fl <sub>2</sub>	ʒ <sub>3</sub>	/ <sub>4</sub>	· <sub>5</sub>	” <sub>6</sub>	„ <sub>7</sub>	~0x
'01x	g <sub>8</sub>	g <sub>9</sub>	g <sub>10</sub>	g <sub>11</sub>	g <sub>12</sub>	g <sub>13</sub>	g <sub>14</sub>	g <sub>15</sub>	~1x
'02x	l <sub>16</sub>	j <sub>17</sub>	‘ <sub>18</sub>	’ <sub>19</sub>	ˇ <sub>20</sub>	ˇ <sub>21</sub>	‐ <sub>22</sub>	° <sub>23</sub>	~2x
'03x	„ <sub>24</sub>	ß <sub>25</sub>	æ <sub>26</sub>	œ <sub>27</sub>	ø <sub>28</sub>	Æ <sub>29</sub>	Œ <sub>30</sub>	Ø <sub>31</sub>	~3x
'04x	! <sub>32</sub>	! <sub>33</sub>	” <sub>34</sub>	# <sub>35</sub>	\$ <sub>36</sub>	% <sub>37</sub>	£ <sub>38</sub>	’ <sub>39</sub>	~4x
'05x	( <sub>40</sub> )	( <sub>41</sub> )	* <sub>42</sub>	+ <sub>43</sub>	, <sub>44</sub>	- <sub>45</sub>	. <sub>46</sub>	/ <sub>47</sub>	~5x
'06x	0 <sub>48</sub>	1 <sub>49</sub>	2 <sub>50</sub>	3 <sub>51</sub>	4 <sub>52</sub>	5 <sub>53</sub>	6 <sub>54</sub>	7 <sub>55</sub>	~6x
'07x	8 <sub>56</sub>	9 <sub>57</sub>	: <sub>58</sub>	; <sub>59</sub>	< <sub>60</sub>	= <sub>61</sub>	> <sub>62</sub>	? <sub>63</sub>	~7x
'08x	@ <sub>64</sub>	A <sub>65</sub>	B <sub>66</sub>	C <sub>67</sub>	D <sub>68</sub>	E <sub>69</sub>	F <sub>70</sub>	G <sub>71</sub>	~8x
'09x	H <sub>72</sub>	I <sub>73</sub>	J <sub>74</sub>	K <sub>75</sub>	L <sub>76</sub>	M <sub>77</sub>	N <sub>78</sub>	O <sub>79</sub>	~9x
'10x	P <sub>80</sub>	Q <sub>81</sub>	R <sub>82</sub>	S <sub>83</sub>	T <sub>84</sub>	U <sub>85</sub>	V <sub>86</sub>	W <sub>87</sub>	~Ax
'11x	X <sub>88</sub>	Y <sub>89</sub>	Z <sub>90</sub>	[ <sub>91</sub>	\ <sub>92</sub>	] <sub>93</sub>	^ <sub>94</sub>	_ <sub>95</sub>	~Ex
'12x	‘ <sub>96</sub>	a <sub>97</sub>	b <sub>98</sub>	c <sub>99</sub>	d <sub>100</sub>	e <sub>101</sub>	f <sub>102</sub>	g <sub>103</sub>	~Bx
'13x	h <sub>104</sub>	i <sub>105</sub>	j <sub>106</sub>	k <sub>107</sub>	l <sub>108</sub>	m <sub>109</sub>	n <sub>110</sub>	o <sub>111</sub>	~Cx
'14x	p <sub>112</sub>	q <sub>113</sub>	r <sub>114</sub>	s <sub>115</sub>	t <sub>116</sub>	u <sub>117</sub>	v <sub>118</sub>	w <sub>119</sub>	~Dx
'15x	x <sub>120</sub>	y <sub>121</sub>	z <sub>122</sub>	{ <sub>123</sub>	<sub>124</sub>	} <sub>125</sub>	~ <sub>126</sub>	.. <sub>127</sub>	~Fx
'16x	ł <sub>128</sub>	‘ <sub>129</sub>	, <sub>130</sub>	f <sub>131</sub>	„ <sub>132</sub>	... <sub>133</sub>	† <sub>134</sub>	‡ <sub>135</sub>	~Ex
'17x	^ <sub>136</sub>	% <sub>00</sub> <sub>137</sub>	š <sub>138</sub>	‘ <sub>139</sub>	œ <sub>140</sub>	ž <sub>141</sub>	ʌ <sub>142</sub>	— <sub>143</sub>	~Ax
'18x	ł <sub>144</sub>	‘ <sub>145</sub>	’ <sub>146</sub>	” <sub>147</sub>	” <sub>148</sub>	• <sub>149</sub>	— <sub>150</sub>	— <sub>151</sub>	~Bx
'19x	~ <sub>152</sub>	TM <sub>153</sub>	š <sub>154</sub>	) <sub>155</sub>	œ <sub>156</sub>	ž <sub>157</sub>	~ <sub>158</sub>	ÿ <sub>159</sub>	~Cx
'20x	ı <sub>160</sub>	ı <sub>161</sub>	ç <sub>162</sub>	ƒ <sub>163</sub>	¤ <sub>164</sub>	¥ <sub>165</sub>	ı <sub>166</sub>	§ <sub>167</sub>	~Dx
'21x	“ <sub>168</sub>	© <sub>169</sub>	ª <sub>170</sub>	« <sub>171</sub>	¬ <sub>172</sub>	- <sub>173</sub>	(R) <sub>174</sub>	- <sub>175</sub>	~Ex
'22x	º <sub>176</sub>	± <sub>177</sub>	² <sub>178</sub>	³ <sub>179</sub>	’ <sub>180</sub>	µ <sub>181</sub>	¶ <sub>182</sub>	· <sub>183</sub>	~Fx
'23x	„ <sub>184</sub>	¹ <sub>185</sub>	º <sub>186</sub>	» <sub>187</sub>	¼ <sub>188</sub>	½ <sub>189</sub>	¾ <sub>190</sub>	¸ <sub>191</sub>	
'24x	À <sub>192</sub>	Á <sub>193</sub>	Â <sub>194</sub>	Ã <sub>195</sub>	Ä <sub>196</sub>	Å <sub>197</sub>	Æ <sub>198</sub>	Ç <sub>199</sub>	
'25x	È <sub>200</sub>	É <sub>201</sub>	Ê <sub>202</sub>	Ë <sub>203</sub>	Ì <sub>204</sub>	Í <sub>205</sub>	Î <sub>206</sub>	Ï <sub>207</sub>	
'26x	Ð <sub>208</sub>	Ñ <sub>209</sub>	Ò <sub>210</sub>	Ó <sub>211</sub>	Ô <sub>212</sub>	Õ <sub>213</sub>	Ö <sub>214</sub>	× <sub>215</sub>	
'27x	Ø <sub>216</sub>	Ù <sub>217</sub>	Ú <sub>218</sub>	Û <sub>219</sub>	Ü <sub>220</sub>	Ý <sub>221</sub>	Þ <sub>222</sub>	ß <sub>223</sub>	
'28x	à <sub>224</sub>	á <sub>225</sub>	â <sub>226</sub>	ã <sub>227</sub>	ä <sub>228</sub>	å <sub>229</sub>	æ <sub>230</sub>	ç <sub>231</sub>	
'29x	è <sub>232</sub>	é <sub>233</sub>	ê <sub>234</sub>	ë <sub>235</sub>	ì <sub>236</sub>	í <sub>237</sub>	î <sub>238</sub>	ï <sub>239</sub>	
'30x	ő <sub>240</sub>	ñ <sub>241</sub>	ò <sub>242</sub>	ó <sub>243</sub>	ô <sub>244</sub>	õ <sub>245</sub>	ö <sub>246</sub>	÷ <sub>247</sub>	
'31x	ø <sub>248</sub>	ù <sub>249</sub>	ú <sub>250</sub>	û <sub>251</sub>	ü <sub>252</sub>	ý <sub>253</sub>	þ <sub>254</sub>	ÿ <sub>255</sub>	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 6 T1 encoding font table

	‘0	‘1	‘2	‘3	‘4	‘5	‘6	‘7	
‘00x	` 0	’ 1	^ 2	~ 3	“ 4	” 5	° 6	ˇ 7	“0x
‘01x	ˇ 8	ˉ 9	ˉ 10	ˉ 11	ˉ 12	, 13	‘ 14	‘ 15	
‘02x	“ 16	” 17	“ 18	“ 19	” 20	– 21	— 22	23	“1x
‘03x	24	I 25	J 26	fi 27	fl 28	29	30	31	
‘04x	؂ 32	! 33	” 34	# 35	\$ 36	% 37	؈ 38	؉ 39	“2x
‘05x	( 40	) 41	* 42	+ 43	, 44	- 45	. 46	/ 47	
‘06x	ؐ 48	ؑ 49	ؒ 50	ؓ 51	ؔ 52	ؕ 53	ؖ 54	ؗ 55	“3x
‘07x	ؘ 56	ؙ 57	: 58	; 59	< 60	= 61	> 62	? 63	
‘10x	@ 64	ؑ 65	ؒ 66	ؓ 67	ؔ 68	ؕ 69	ؖ 70	ؗ 71	“4x
‘11x	ؐ 72	ؑ 73	ؒ 74	ؓ 75	ؔ 76	ؕ 77	ؖ 78	ؗ 79	
‘12x	ؐ 80	ؑ 81	ؒ 82	ؓ 83	ؔ 84	ؕ 85	ؖ 86	ؗ 87	“5x
‘13x	ؐ 88	ؑ 89	ؒ 90	[ 91	\ 92	] 93	ؘ 94	ؙ 95	
‘14x	‘ 96	ؑ 97	ؒ 98	ؓ 99	ؔ 100	ؕ 101	ؖ 102	ؗ 103	“6x
‘15x	ؑ 104	ؑ 105	ؒ 106	ؓ 107	ؔ 108	ؕ 109	ؖ 110	ؗ 111	
‘16x	ؑ 112	ؑ 113	ؒ 114	ؓ 115	ؔ 116	ؕ 117	ؖ 118	ؗ 119	“7x
‘17x	ؑ 120	ؑ 121	ؒ 122	{ 123	124	} 125	ؘ 126	ؙ 127	
‘20x	ؑ 128	ؑ 129	ؒ 130	ؓ 131	ؔ 132	ؕ 133	ؖ 134	ؗ 135	“8x
‘21x	ؑ 136	ؑ 137	ؒ 138	ؓ 139	ؔ 140	141	ؖ 142	ؗ 143	
‘22x	ؑ 144	ؑ 145	ؒ 146	ؓ 147	ؔ 148	ؕ 149	ؖ 150	ؗ 151	“9x
‘23x	ؑ 152	ؑ 153	ؒ 154	ؓ 155	ؔ 156	ؕ 157	ؖ 158	ؗ 159	
‘24x	ؑ 160	ؑ 161	ؒ 162	ؓ 163	ؔ 164	ؕ 165	ؖ 166	ؗ 167	“Ax
‘25x	ؑ 168	ؑ 169	ؒ 170	ؓ 171	ؔ 172	173	ؖ 174	ؗ 175	
‘26x	ؑ 176	ؑ 177	ؒ 178	ؓ 179	ؔ 180	ؕ 181	ؖ 182	ؗ 183	“Bx
‘27x	ؑ 184	ؑ 185	ؒ 186	ؓ 187	ؔ 188	ؕ 189	ؖ 190	ؗ 191	
‘30x	ؑ 192	ؑ 193	ؒ 194	ؓ 195	ؔ 196	ؕ 197	ؖ 198	ؗ 199	“Cx
‘31x	ؑ 200	ؑ 201	ؒ 202	ؓ 203	ؔ 204	ؕ 205	ؖ 206	ؗ 207	
‘32x	ؑ 208	ؑ 209	ؒ 210	ؓ 211	ؔ 212	ؕ 213	ؖ 214	ؗ 215	“Dx
‘33x	ؑ 216	ؑ 217	ؒ 218	ؓ 219	ؔ 220	ؕ 221	ؖ 222	ؗ 223	
‘34x	ؑ 224	ؑ 225	ؒ 226	ؓ 227	ؔ 228	ؕ 229	ؖ 230	ؗ 231	“Ex
‘35x	ؑ 232	ؑ 233	ؒ 234	ؓ 235	ؔ 236	ؕ 237	ؖ 238	ؗ 239	
‘36x	ؑ 240	ؑ 241	ؒ 242	ؓ 243	ؔ 244	ؕ 245	ؖ 246	ؗ 247	“Fx
‘37x	ؑ 248	ؑ 249	ؒ 250	ؓ 251	ؔ 252	ؕ 253	ؖ 254	ؗ 255	
	ؑ 8	ؑ 9	ؑ A	ؑ B	ؑ C	ؑ D	ؑ E	ؑ F	

## 7 TS1 encoding font table

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	0	1	2	3	4	5	6	7	'0x
'01x	8	9	10	, 11	, 12	, 13	14	15	
'02x	16	17	, 18	19	20	— 21	— 22	23	'1x
'03x	24	25	26	27	28	29	30	31	
'04x	„ 32	33	34	35	\$ 36	37	38	', 39	'2x
'05x	40	41	* 42	43	, 44	45	, 46	/ 47	
'06x	48	49	50	51	52	53	54	55	'3x
'07x	56	57	58	59	60	— 61	62	63	
'12x	80	81	82	83	84	85	86	Ω 87	'5x
'13x	88	89	90	91	92	93	94	95	
'20x	128	129	130	131	† 132	‡ 133	134	% 00 135	'8x
'21x	• 136	°C 137	138	139	f 140	141	142	143	
'22x	144	145	146	147	? 148	đ 149	150	TM 151	'9x
'23x	152	153	154	155	156	E 157	158	159	
'24x	160	161	C 162	f 163	¤ 164	¥ 165	i 166	§ 167	'Ax
'25x	168	© 169	ª 170	171	¬ 172	173	(R) 174	175	
'26x	° 176	± 177	² 178	³ 179	180	μ 181	¶ 182	· 183	'Bx
'27x	184	¹ 185	º 186	√ 187	¼ 188	½ 189	¾ 190	€ 191	
'32x	208	209	210	211	212	213	× 214	215	'Dx
'33x	216	217	218	219	220	221	222	223	
'36x	240	241	242	243	244	245	÷ 246	247	'Fx
'37x	248	249	250	fl 251	l 252	fi 253	i 254	f 255	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 8 Text samples

### Regular

*Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.*

*Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890*

### Italic

***Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.***

***Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890***

## **Bold**

*Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.*

*Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890*

## **Bold italic**

***Lore** ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.*

***Nam** dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890*

## **Black**

***Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.***

***Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascentur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.*** 1234567890

## **Black italic**

***Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.***

***Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascentur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.*** 1234567890

## **Light**

*Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.*

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890

## **Light italic**

*Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.*

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris. 1234567890

## 9 Implementation

Font support files are generated by `autoinst`, invoked with:

```
autoinst          \
  --encoding=OT1,T1,LY1 \
  --ts1             \
  --sanserif        \
  --defaultlining   \
  --defaulttabular  \
  --nooldstyle      \
  --noproportional  \
  --nosmallcaps    \
  --noswash          \
  --notitling       \
  --nosuperiors     \
  --noinferiors     \
  --fractions        \
  --noornaments     \
  --noupdmap         \
  --verbose          \
Chivo-*.otf
```

We don't use the `Chivo.sty` generated by `autoinst` and use our version instead.

### 9.1 Chivo.sty

```
1 {*package}
```

First, we need a switch to know which engine is used:

```
2 \newif\ifChivo@otf
3 \ifdefinable\XeTeXinterchartoks % we are in XeTeX
4   \Chivo@otftrue
5 \else
6   \ifdefined\directlua           % we are in LuaTeX
7     \Chivo@otftrue
8   \fi
9 \fi
```

Load the packages we rely on: `fontspec.sty`<sup>4</sup> or `mweights.sty`<sup>5</sup>:

```
10 \ifChivo@otf
11   \RequirePackage{fontspec}
12 \else
13   \RequirePackage{mweights}
14 \fi
```

We use `kvoptions`<sup>6</sup> for our purposes:

```
15 \RequirePackage{kvoptions}
```

Setup the keyval options:

---

4. <https://www.ctan.org/pkg/fontspec>  
5. <https://www.ctan.org/pkg/mweights>  
6. <https://www.ctan.org/pkg/kvoptions>

```

16 \SetupKeyvalOptions{%
17   family = Chivo ,
18   prefix = Chivo@
19 }

The basic strategy for font related keys is to declare them as complementary options.
20 \DeclareBoolOption{regular}
21 \DeclareComplementaryOption{light}{regular}
22 \DeclareBoolOption{bold}
23 \DeclareComplementaryOption{black}{bold}

scale key is special: With (pdf)LaTeX, it is a string option, with XeLaTeX and
LuaLaTeX, it is a void option and generates a warning.
24 \ifChivo@otf
25   \DeclareVoidOption{scale}{\relax}
26 \else
27   \DeclareStringOption[1.0]{scale}
28 \fi

familydefault switches the default font to Chivo.
29 \DeclareBoolOption{familydefault}

The next 2 are for users where the automatic engine detection might fail.
30 \DeclareVoidOption{opentype}{\Chivo@otftrue}
31 \DeclareVoidOption{type1}{\Chivo@otffalse}

Execute the default options and process them.
32 \setkeys{Chivo}{regular,bold}
33 \ProcessKeyvalOptions{Chivo}

Definition for regular and light keys for traditional engines:
34 \ifChivo@otf \else
35   \ifChivo@regular
36     \def\mdseries@sf{m}
37   \else
38     \def\mdseries@sf{l}
39   \fi
40 \fi

Definition for bold and black keys for traditional engines:
41 \ifChivo@otf \else
42   \ifChivo@bold
43     \def\bfseries@sf{b}
44   \else
45     \def\bfseries@sf{k}
46   \fi
47 \fi

For XeLaTeX/LuaLaTeX, we define the font features depending on the given
package options:
48 \ifChivo@otf
49   \ifChivo@regular
50     \ifChivo@bold
51       \defaultfontfeatures[Chivo]
52       {
53         Extension      = .otf
54       }
55     \else
56       \defaultfontfeatures[Chivo]
57       {
58         Extension      = .tt
59       }
56     \fi
57   \else
58     \defaultfontfeatures[Chivo]
59     {
60       Extension      = .tt
61     }
57   \fi
58 \fi

```

```

54     BoldFont      = Chivo-Bold      ,
55     ItalicFont   = Chivo-Italic   ,
56     BoldItalicFont = Chivo-BoldItalic ,
57     UprightFont  = Chivo-Regular
58 }
59 \else
60   \defaultfontfeatures[Chivo]
61   {
62     Extension    = .otf           ,
63     BoldFont     = Chivo-Black    ,
64     ItalicFont   = Chivo-Italic   ,
65     BoldItalicFont = Chivo-BlackItalic ,
66     UprightFont  = Chivo-Regular
67 }
68 \fi
69 \else
70   \ifChivo@bold
71     \defaultfontfeatures[Chivo]
72     {
73       Extension    = .otf           ,
74       BoldFont     = Chivo-Bold     ,
75       ItalicFont   = Chivo-LightItalic ,
76       BoldItalicFont = Chivo-BoldItalic ,
77       UprightFont  = Chivo-Light
78     }
79 \else
80   \defaultfontfeatures[Chivo]
81   {
82     Extension    = .otf           ,
83     BoldFont     = Chivo-Black    ,
84     ItalicFont   = Chivo-LightItalic ,
85     BoldItalicFont = Chivo-BlackItalic ,
86     UprightFont  = Chivo-Light
87   }
88 \fi
89 \fi
90 \fi

```

Switch the sans serif font to Chivo; the fonts provide only tabular lining figures. With `fontspec`, we delay the `\setsansfont` until `AtBeginDocument` so that user can provide additional features with `\defaultfontfeatures+`.

```

91 \ifChivo@otf
92   \AtBeginDocument{%
93     \setsansfont{Chivo}%
94   }
95 \else
96   \renewcommand*{\sfdefault}{Chivo-TLF}
97 \fi

```

Switch the default font if the respective key is given:

```

98 \ifChivo@familydefault
99   \renewcommand*{\familydefault}{\sfdefault}
100 \ifChivo@otf\else

```

```
101      \ifChivo@regular \else
102          \edef\seriesdefault{\mdseries@sf}
103      \fi
104      \ifChivo@bold \else
105          \edef\bfdefault{\bfseries@sf}
106      \fi
107  \fi
108 \fi
109 </package>
```

## Change History

v1.0  
General: Initial version . . . . . 1