Errata of 'Bayesian Inference with INLA'

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This document lists the errata found in the printed edition of the book $Bayesian\ Inference\ with\ INLA$ by V. Gómez-Rubio and published by CRC Press/Taylor and Francis. These errata have been fixed in the on-line version of the book. As of 19/07/2021 the R code has been tested on R 4.0.5 and it runs smoothly.

- Some minor typos have been fixed in the text.
- Page 15. There is a typo in the second equation (reported by Milind Sharma). It should read as follows:

$$\pi(x_l \mid \mathbf{y}) = \int \pi(x_l \mid \boldsymbol{\theta}, \mathbf{y}) \pi(\boldsymbol{\theta} \mid \mathbf{y}) d\boldsymbol{\theta}$$

• Page 16. There is a typo in the second equation (reported by Milind Sharma). It should read as follows:

$$\pi_{LA}(x_i \mid \boldsymbol{\theta}, \mathbf{y}) \propto N(x_i \mid \mu_i(\boldsymbol{\theta}), \sigma_i^2(\boldsymbol{\theta})) \exp(spline(x_i))$$

- Page 110. Half-Cauchy prior is $\pi_{HC}(\sigma|\gamma)$ (and not $\pi_{HN}(\sigma|\gamma)$).
- Page 110. Half-t prior is $\pi_{HT}(\sigma|\nu)$ (and not $\pi_{HN}(\sigma|\nu)$).
- Page 154. The computation of the Q matrix for the Leroux model is wrong. The code should read:

```
Q <- Diagonal(x = sapply(boston.adj, length))
Q <- Q - as_dsTMatrix_listw(nb2listw(boston.adj, style = "B"))</pre>
```

Page 168. The convertion from degrees to radians is wrong (thanks to Hal Voepel for reporting this).
 The R code has been fixed as follows:

```
#In addition, we will rescale `elevation` (to express it in kilometers) and
#`orientation` (to be in radians) so that fixed effects are better estimated:
clmfires.extra$clmcov100$elevation <-
    clmfires.extra$clmcov100$elevation / 1000
clmfires.extra$clmcov100$orientation <-
    clmfires.extra$clmcov100$orientation * pi / 180</pre>
```

• Page 169. The data and mesh points are in the incorrect order in allpts (reported by Rafael Arce Guillen). The code has been ammended as follows:

```
#Points
clm.pts <- as.matrix(coords(clmfires0407))
clm.mesh.pts <- as.matrix(clm.mesh$loc[, 1:2])
allpts <- rbind(clm.mesh.pts, clm.pts)</pre>
```

Note that this is the required order because the other variables created for model fitting (e.g., y.pp, e.pp, etc.) assume that the mesh points are before the data points in allpts.

Please, check the updated results of the 'Castilla-La Mancha forest fires example' in the Gitbook version
of the book.