## Tutorials for R

Author: Daniel VAULOT

UMR 7144 CNRS-UPMC, Station Biologique, Place G. Tessier, 29680 Roscoff FRANCE

email: vaulot@sb-roscoff.fr / vaulot@gmail.com

I will post here a few tutorials for different types of analysis of microbial communities. For each of these of these tutorials there will be a detailed explanation as a pdf file created with Rmd.

- introduction to R: https://github.com/vaulot/R\_tutorials/tree/master/introduction
- phyloseq : https://github.com/vaulot/R\_tutorials/tree/master/phyloseq

Please post any question or issues here: https://github.com/vaulot/R tutorials/issues

The whole set of tutorials can be downloaded at https://github.com/vaulot/R\_tutorials/releases

## Prerequisites to be installed to run these tutorials

- R studio : https://www.rstudio.com/products/rstudio/download/#download
- Download and install the following libraries by running under R studio the following lines

```
install.packages("dplyr")
                             # To manipulate dataframes
install.packages("tidyr")
                             # To manipulate dataframes
install.packages("readxl")
                             # To read Excel files into R
install.packages("ggplot2")
                             # for high quality graphics
install.packages("maps")
                             # to make maps
install.packages("treemap")
                             # for treemaps
install.packages("FactoMineR") # multivariate analysis
source("https://bioconductor.org/biocLite.R")
biocLite('phyloseq')
                       # metabarcode data analysis
biocLite("Biostrings")
                             # manipulate sequences
```