

# Analyzing the capacity of the colBiSBM to recover structure for missing data from other networks

```
## Le chargement a nécessité le package : ggplot2
## Le chargement a nécessité le package : tidyverse
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.2      v readr      2.1.4
## v forcats    1.0.0      v stringr   1.5.0
## v lubridate  1.9.2      v tibble    3.2.1
## v purrr      1.0.1      v tidyr     1.3.0
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
## `summarise()` has grouped output by 'prop_NAs'. You can override using the
## `.groups` argument.
```

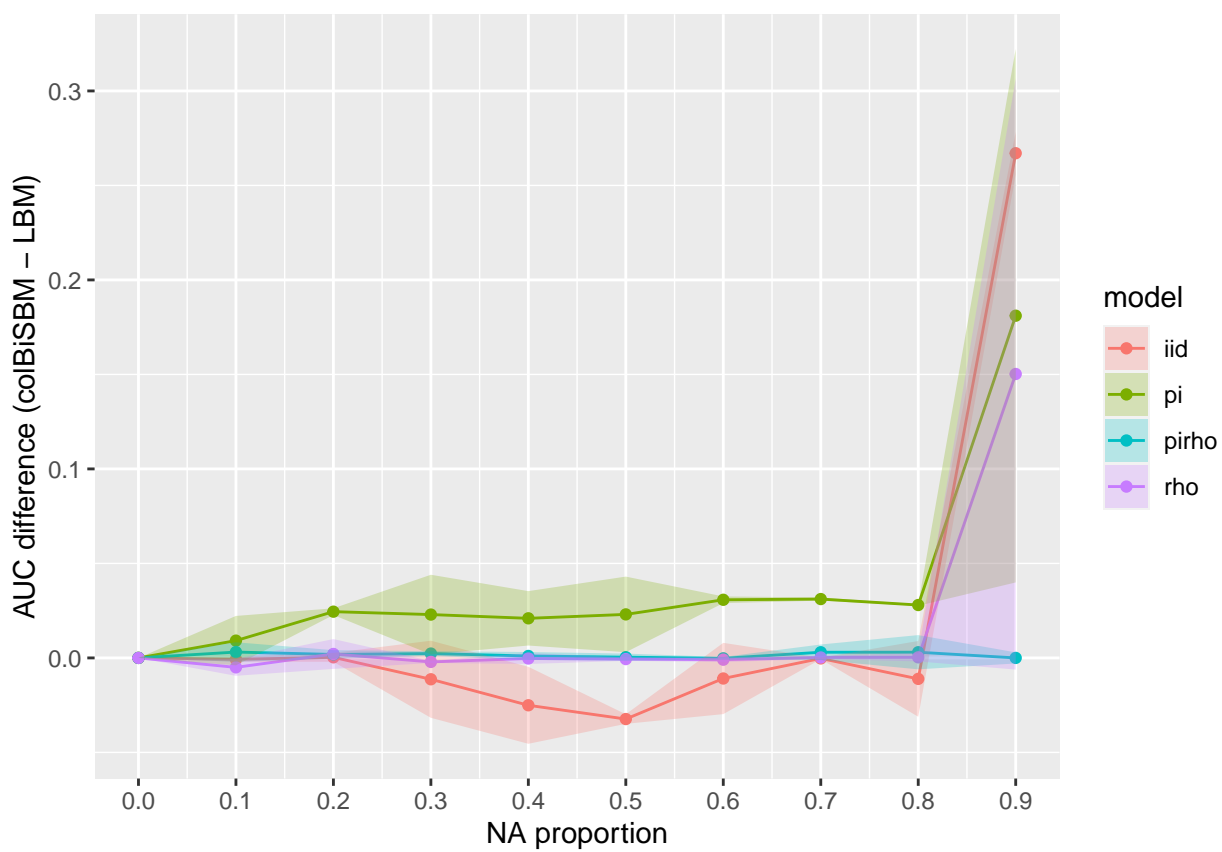
## Contexte des simulations

The idea is to benchmark the capacity of the models when NAs are in the data.

To do this, we choose the below structure: ! PARAMETERS OF THE SIMULATION !

And set some randomly chosen interactions to NA. The below plots will show the different quality indicators in function of proportion of NAs in the first of the 3 networks.

## AUC in function of the proportion of NAs



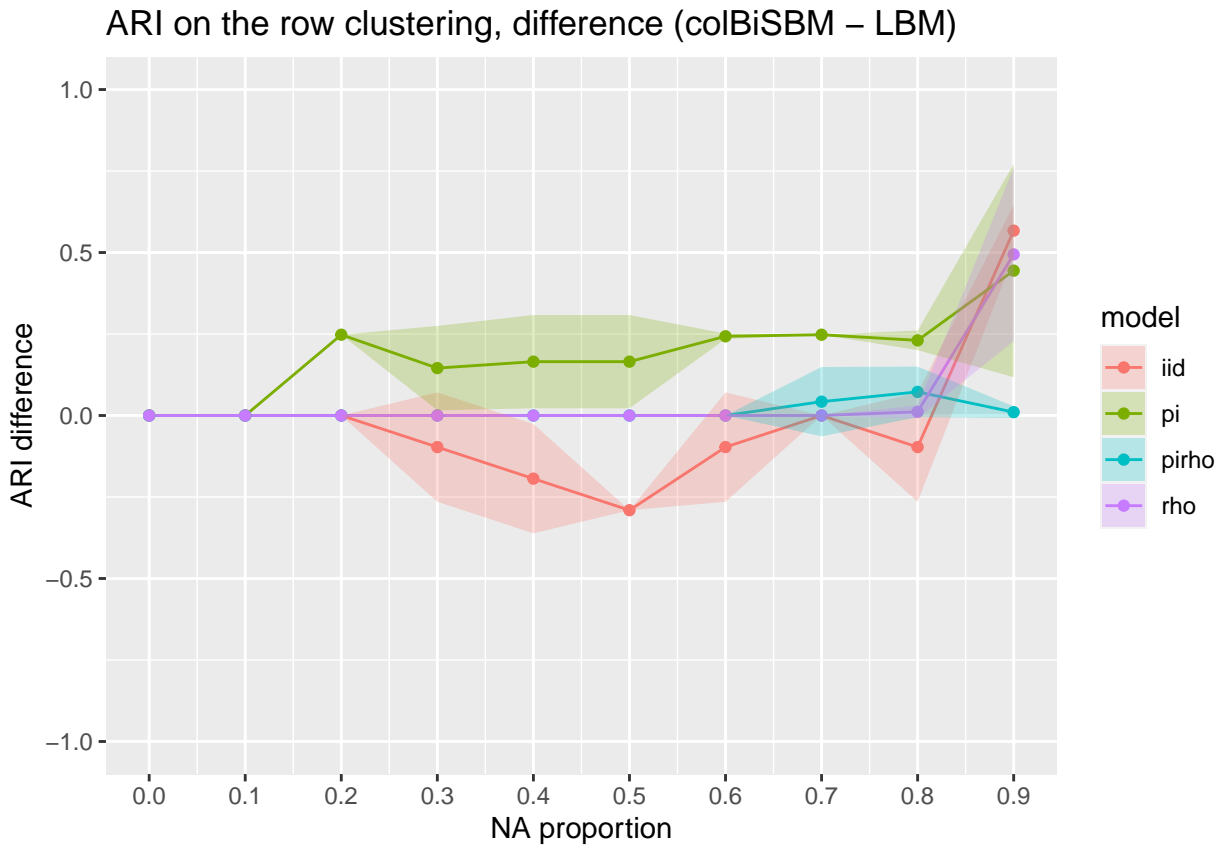


Figure 1: Difference of ARI for the row clusterings

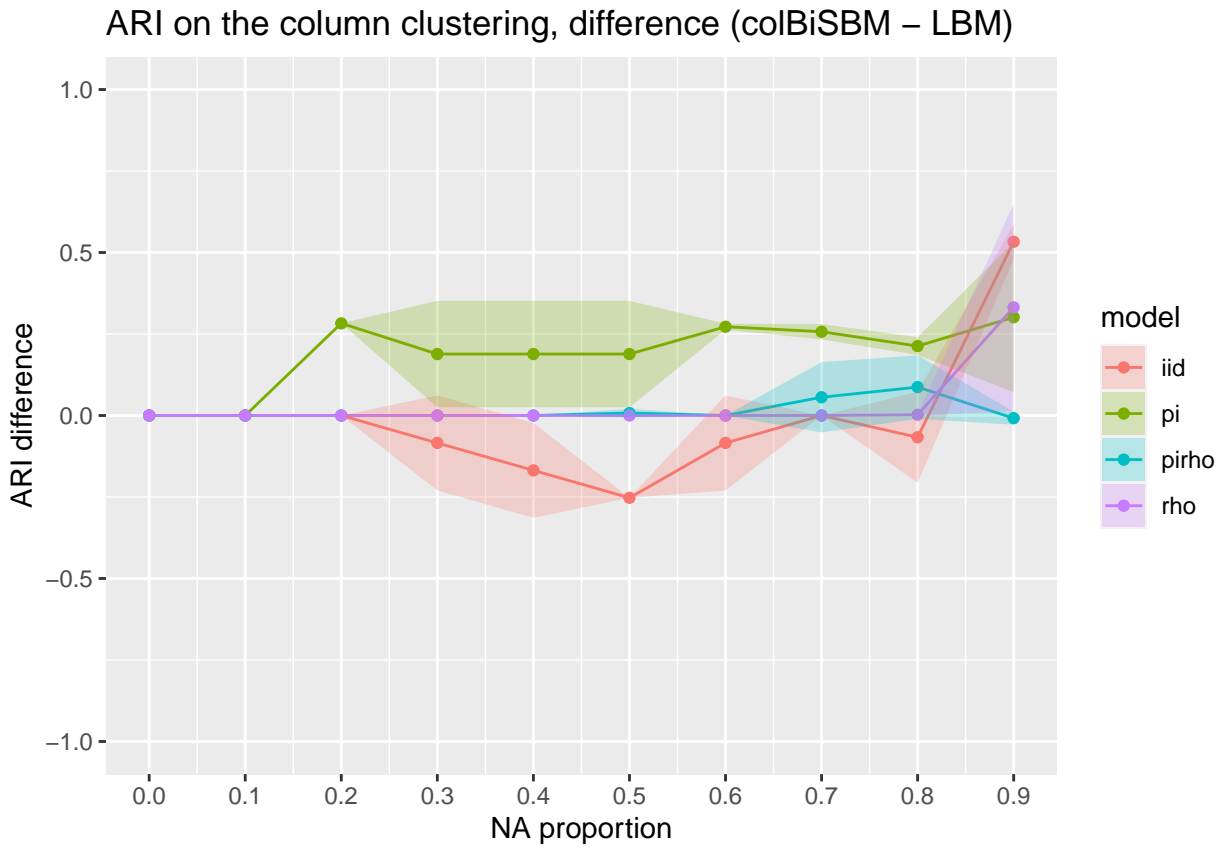


Figure 2: Difference of ARI for the columns clusterings