## ICL maximisation for discrete latent variable models

Etienne Côme 23 mai 2019

```
N=1500
K=15
pi=rep(1/K,K)
lambda = 0.1
lambda_o = 0.025
Ks=5
mu = bdiag(lapply(1:(K/Ks), function(k){matrix(lambda_o,Ks,Ks)+diag(rep(lambda,Ks))}))+0.001
sbm = rsbm(N,pi,mu)
```

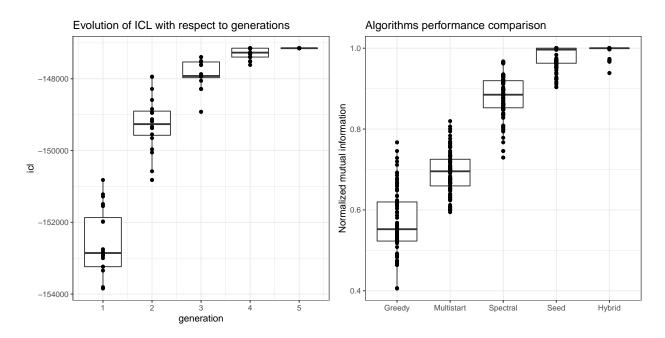


Figure 1: Evolution of the ICL criterion aliong the different generation build by the algorithm (left). comparison in term of NMI with the simulated clusters for several algorithm.