Posterior distribution for phase fraction:

Where

Mathematical Model:

Graphical Model Legend

* : phase fraction (mean of gaussian RV)
* : standard deviation for gaussian RV
* : observed fitted normalized intensities
* : latent mean normalized intensities for each sample
* Rectangle: indicates replication of size indicated in lower right-hand corner
* Shaded circle: indicates observed parameter/random variable
* Unshaded circle: indicates unobserved parameter/random variable