

Line	Description	Example
13	Tuning parameters for updating coefficients at center level of cause 2	0.4
14	Tuning parameters for random effects	0.09 0.1
15	Upperbounds of uniform for std. of random effects	2.3 1.8
16	Parameters of beta distribution for updating normalized constant	3.0 7.0
17	Initial values for parameters of centering distribution	1.0 1.0

The first two lines are for the practical setting in MPT. According to Hanson (2006), level in MPT can be approximately equal to $\log_2(n=N)$, where n is the sample size of observed data and N is a typical number of observations falling into each partition

2. **Competing risks data *data.txt*:** Each row contains failure time, covariates at individual level, covariates at center level, failure cause and center indication for each individual. The dimension for covariates at the individual level, p , should be the same as defined in line 4 of *parameter.txt* and the dimension for covariates at the center level, c , is the same as defined in line 5. Under the competing risks setting, the cause of interest is coded as 1 and failure due to other causes as 2. In the presence of right censoring, the failure cause is coded as 0. The center indication for the last observation has the same value as declared in line 6. For example,

Time	Cov. 1	Cov. p	Cov. 1	Cov. c	Cause	Center
1.5239	0.1339	-0.0881	1	-1.6449	2	1
1.1686	0.8644	-1.2870	1	-1.6449	0	1
0.4540	-2.3967	-0.6793	1	-1.6449	1	1
0.0781	-0.3406	-0.9469	0	-0.1257	2	9

Output File Format

Output files will be sent to the directory called *output*. Users need to create such a subdirectory under the directory containing the *TWOLEVEL.c* and the input files. The *output* directory has the acceptance file (*accept.txt*) and the files containing the samples from MCMC chains (*coef1.txt*, *ITJ/Ft*

Label	Cause 1	Cause 2
Polya trees 1	5538	4633
Polya trees 3	5918	3432
Polya trees 5	5706	4068

The next lines are the numbers for updating the normalizing constant (p), parameters (μ) in centering distribution for cause 1 and cause 2, coefficients at individual level for cause 1, coefficients at individual level for cause 2, coefficients at center level for cause 1, coefficients at center level for cause 2, random effects for both causes and standard deviations (

Fan, X. (2008). Bayesian Nonparametric Inference for Competing Risks Data. Ph.D. Thesis, Medical College of Wisconsin, Milwaukee.

Hanson, T. (2006). Inference for Mixtures of Finite Polya Tree Models. *Journal of the American Statistical Association* 101, 1548-1565.