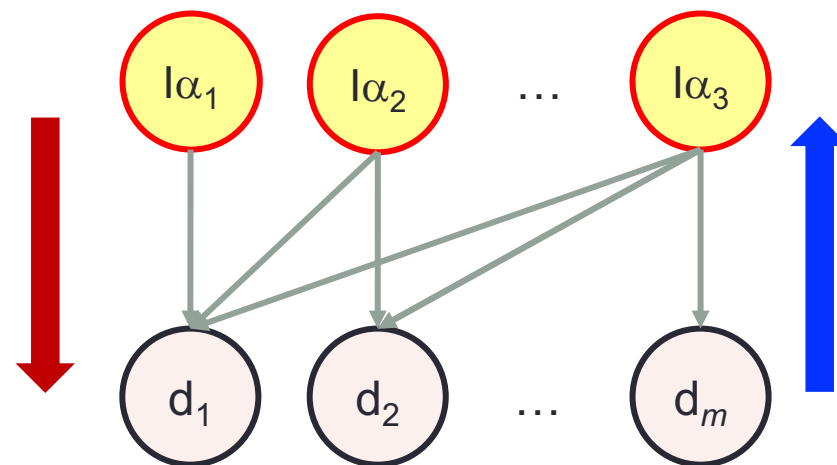
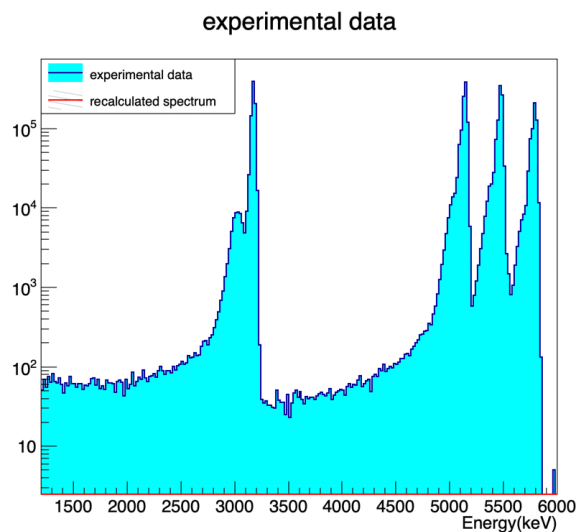


Alpha spectroscopy Bayesian Network

- Infer the “true” alpha intensity and therefore composition of an emitting source, from a measured alpha spectrum



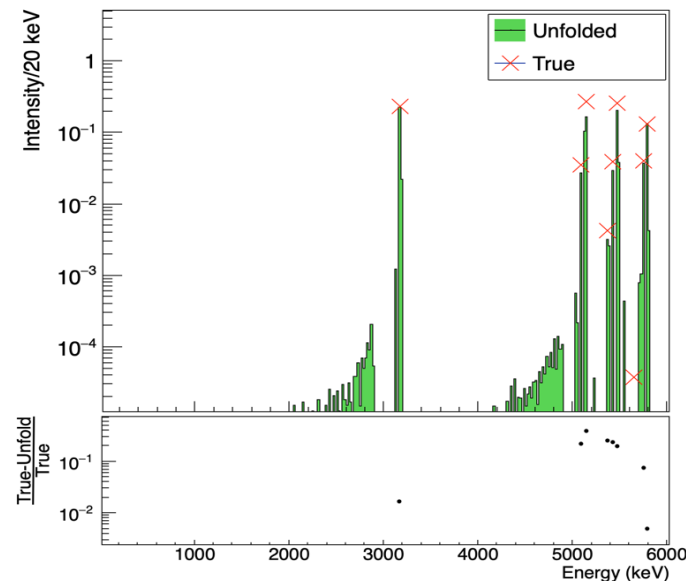
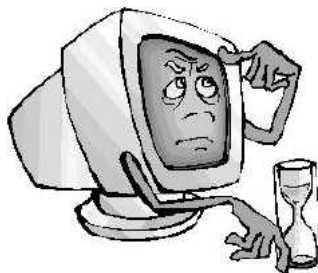
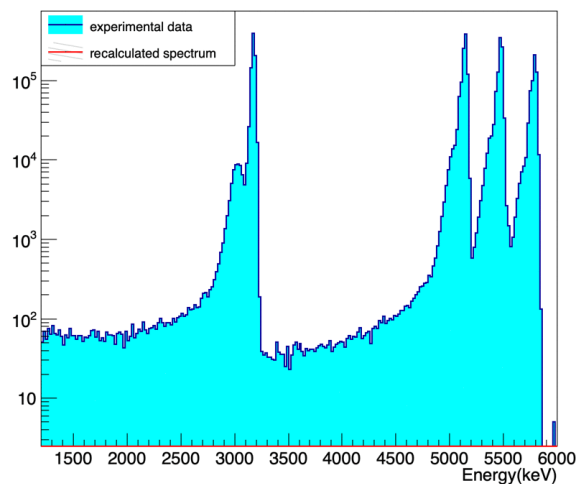
direct probability: $d_i = \sum R_{ij} f_j$

inverse probability: **inference** \rightarrow **learning BN** \rightarrow Lucy-Rich, Genetic (score & search), Markov Chain MC...

Alpha spectroscopy Bayesian Network

- Infer the “true” alpha intensity and therefore composition of an emitting source, from a measured alpha spectrum

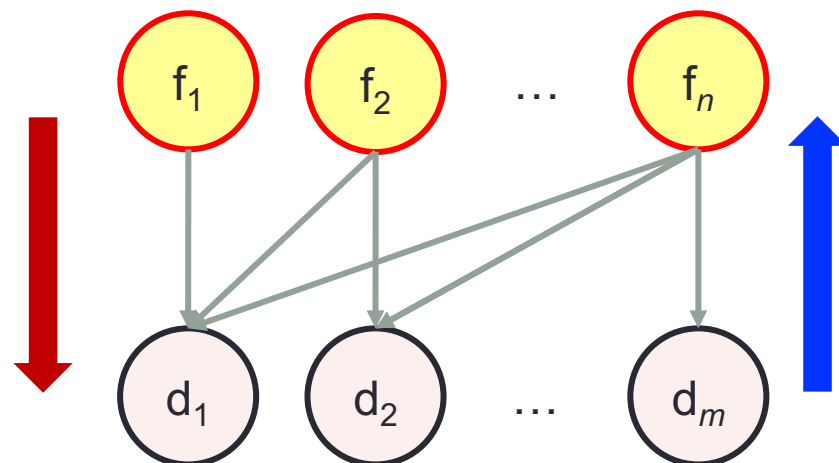
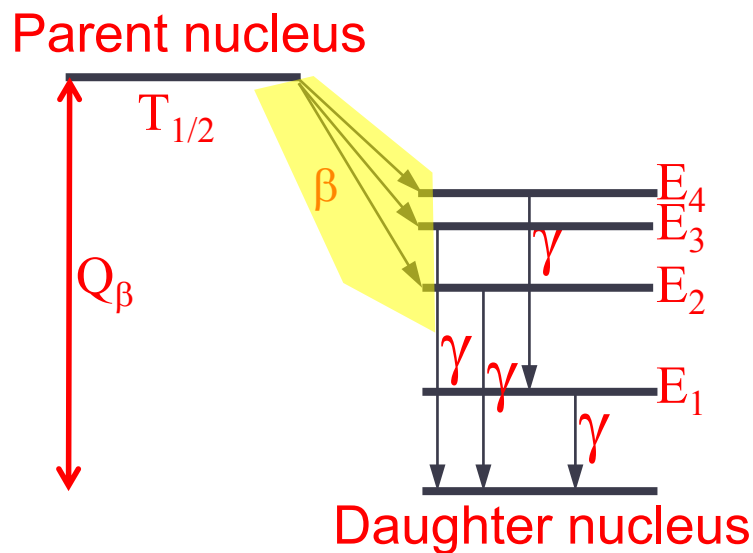
experimental data



direct probability: $d_i = \sum R_{ij} f_j$

inverse probability: inference \rightarrow learning BN \rightarrow Lucy-Rich, Genetic (score & search), Markov Chain MC...

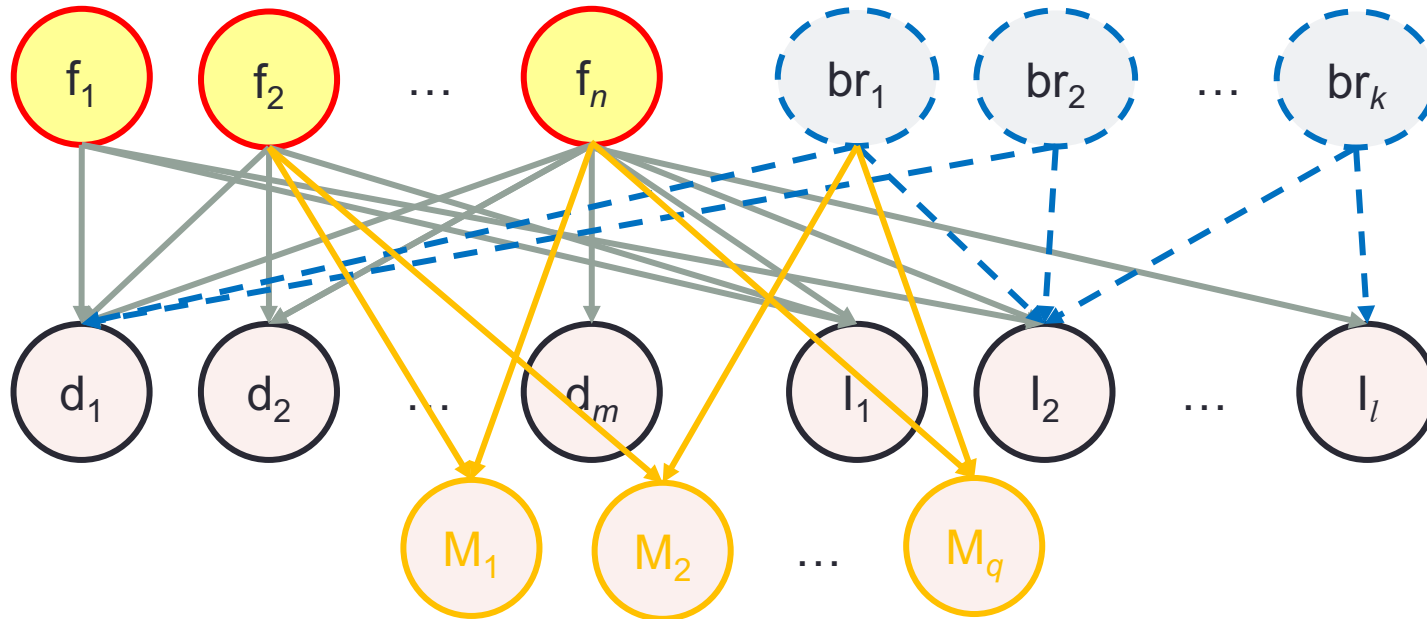
The TAS Bayesian Network



direct probability: $d_i = \sum R_{ij} f_j$

inverse probability: **inference** \rightarrow **learning BN** \rightarrow Lucy-Rich, Genetic (score & search), Markov Chain MC...

The TAS Bayesian Network



- add new observables: gamma intensities and measured multiplicities
- add the br's to the network...,
not so easy, they affect directly the $R_{ij} \rightarrow$ dynamic BN