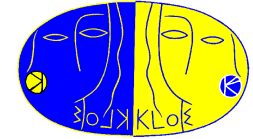
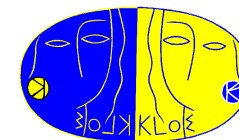


Work finished

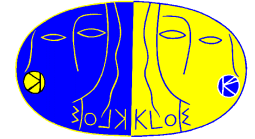


M. Antonelli	ISR and ϕ decay simulation
M. Moulson	Bank-reduction code for DST's
M. Palutan <i>et al.</i>	Trigger simulation parameters
S. Giovannella	GEANFI on IBM



Status reports/Discussion items

S. Dell'Agnello <i>et al.</i>	DC geometry review
S. Miscetti	EmC response validation
S. Miscetti	Event selection for background insertion Background insertion for EmC
M. Moulson	Background insertion for DC DC dead/hot simulation
P. de Simone	DC s - t relations with new sag model
C. Bloise	Other MC tuning
I. Sfiligoi	DB modifications for DST's
All	Production model



DC insertion: to-do list

For DC insertion/simulation code:

A/C module to suppress hits on hot/dead channels

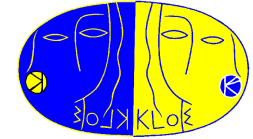
Adjustment for different s - t relations in MC/data

Form of solution (if any) to be determined

Make pristine copy of DTHA bank to allow reprocessing without background?

For INSERT module:

Install KID routines for reading background file



Requirements on DB2

Background can be treated as a datarec stream

New DB requirements for MC runs/files:

- Runs are generated for each raw file in data set

- Additional complications from grouping raw files/splitting MC files

New DB2 tables in logger schema for official MC production

- Link MC runs with background files used for reconstruction

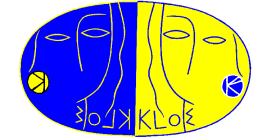
- New tables only supplement existing tables

 - Fully backward compatible

Note:

- MC run number will not correspond to simulated physical run number

- Correspondence will be available from database



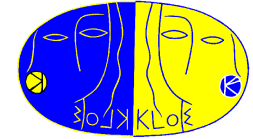
Database modifications

Example of new table to extend information in logger.mc_runs:

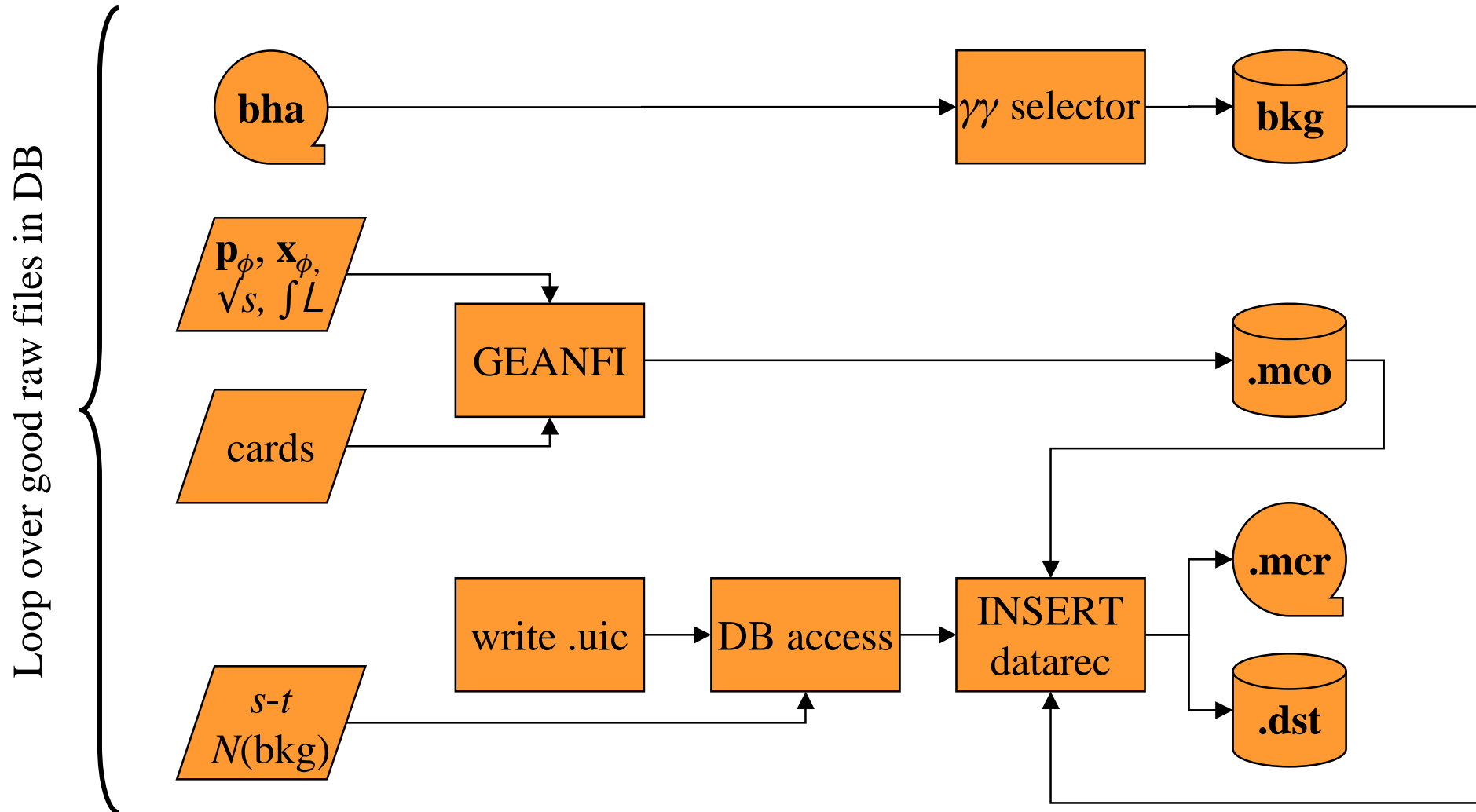
logger.mc_runs One entry per MC run	logger.mc_runs_raws One entry per MC run and background file	
MCCard_ID, MCRun_Nr	MCCard_ID, MCRun_Nr	Primary keys identifying MC run
	Bkg_Run_Nr, Bkg_Version, Bkg_Offline_ID, Bkg_Datarec_Nr, Bkg_Stream_ID, Bkg_GB_Nr	Primary keys of associated background, can be used to index: <ul style="list-style-type: none">• logger.datarec_logger• logger.datarec_raws → logger.raw_logger

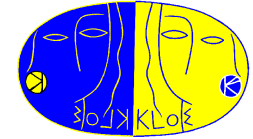
Create views *e.g.*, to allow MC files to be selected by physical run number

Combine or separate neutral kaon runs?



Combined production $K_S \rightarrow \text{all}, K_L \rightarrow \text{all}$	Separate production $K_S \rightarrow \pi^0\pi^0, K_L \rightarrow \text{all}$ $K_S \rightarrow \pi^+\pi^-, K_L \rightarrow \text{all}$ Differentiated by K_T decay in DC?	Combined generation $K_S \rightarrow \text{all}, K_L \rightarrow \text{all}$ Streaming to dst by MC truth
Simpler to produce	Simpler to analyze	Simple to produce and analyze (if no reprocessing)
Fewer files (if file length unsaturated)	Smaller files	Smaller files
Less disk turnover? (if people cooperate)	Less disk turnover? (if event subset dominates interest)	Less disk turnover? (if event subset dominates interest)
	Lighter disk access (if event subset dominates interest)	Lighter disk access (if event subset dominates interest)
No need to prioritize	Possible to prioritize	No need to prioritize
Naturally treats rare channels		Rare channels treated well in generation Problems with zero-length files
Well-suited for background studies (rare K_S decays, non- K_SK_L physics)		Acceptable compromise for background studies (mechanically more running, total volume and content of data set unchanged)





Revisions to production model

Original proposal:

500 pb⁻¹ of $K_S \rightarrow \text{all}$, $K_L \rightarrow \text{all}$ (about 500M events)

Revised proposal:

100 pb⁻¹ of $\phi \rightarrow \text{all}$ (about 300M events)

400 pb⁻¹ of $K_S \rightarrow \text{all}$, $K_L \rightarrow \text{all}$ (about 400M events)

Issues to discuss:

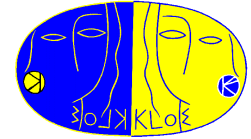
- Temporal profile of MC event subsets
- Separation of DST generation stage
- Streams to create

How many streams, divided on what basis?

Where to incorporate in production chain?

- **kpm** retracking
-

A reflection on streaming



MC output should be as similar to data as possible (except in that all events are kept, even those which don't classify)

Users of particular stream want data reconstructed as they would be in their stream

Implies creation of MC DST's conforming to **datarec** streams, each containing all generated events.

Could avoid this by ignoring t_0 corrections, neutral vertex, etc. and requiring user to apply these at front-end of analysis stage

kpm stream involves special problems due to intensive retracking

Two **datarec**-like DST streams for $\phi \rightarrow$ all events

Data-summary tapes

