

Software Preparation for the Commissioning

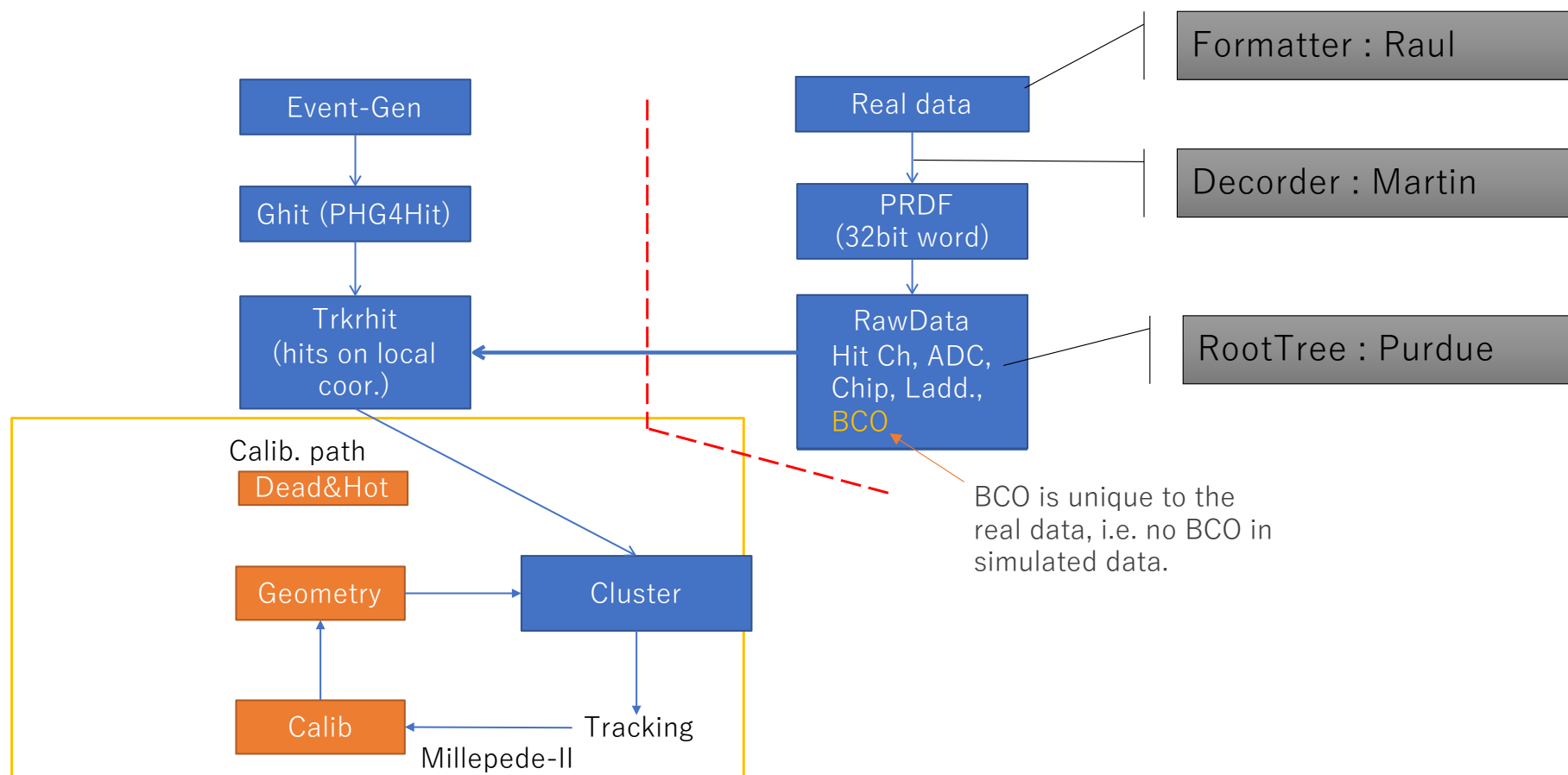
Run23 INTT Manpower Draft commissioning

	Institute	3	4	5	6	7	8	9	10	11	12	1	2	3
Rachid	BNL	30	30	30	30	30	30	30	30	30	30	30	30	30
Itaru	RIKEN	25	30	30	20	30	30	20	30	20			20	20
Akiba			30		30		30			14		14		14
Genki			30	30	30	30	30	30	30	30	30	30	30	30
Tomoya Kato						15	30	15						
Ryota Shishikura						15	30	15						
(Kazuma Fujiki)						15	30	15						
Maya Shimomura	NWU	30	30	30	30	30	30	30	30	30	30	30	30	30
Takashi				15			30	30						
Hata Misaki				30	30	20								
Mai Watanabe				30	30	20								
Yuka Sugiyama														
Hinako Tsujibata			30	30										
Mai Kano				30	30									
Manami Fujiwara					30	30								
Cheng-Wei	NCU	30	30	20		30	30	20						
Wei-Che						30	30	20				30	30	20
Chia-Ming														
Jaemin Hwang	Korea Univ.	30	30	20	30	30	20							
Milan	Purdue Univ.													
Joseph		30	30	30	30	30	30	30	30	30	30	30	30	30
Wei Xie														

Software tasks

Beam test and cosmic ray data analysis		Sugiyuka
QA with ladders at barrels [Asseembly]		Namimo, Hata
Offline code (rawhit and I/F)		
Geometry calibration – millepede		(Namimo)
Unpacker	Purdue, Cheng-Wei	
Online monitor	Purdue	
INTT Event Display		Ru
Expert GUI for sPHENIX	: Imai, Rikkyo	
Standalone DAQ with FELIX: ???		
LV/Bias GUI		Watanabe, Shimo,
Temperature monitor:		

Data Flow for INTT clustering in real data



- PHG4InttSubsystem
 - g4_hits (PHG4HitContainer)
 - PHG4Hitv1
- PHG4InttHitReco
 - input: g4_hits (PHG4HitContainer)
 - Output: hitsetcontainer (TrkrHitSetContainerv1)
 - ヒット位置などChに変換するモジュール
- PHG4InttDigitizer
 - input: hitsetcontainer (TrkrHitSetContainerv1)
 - Output: hitsetcontainer (TrkrHitSetContainerv1)
 - Energy → ADC変換するモジュール
- InttClusterizer
 - Input: hitsetcontainer (TrkrHitSetContainer)
 - Output: TrkrCluster

PHG4Hitv1

```
float x[2] = {NAN, NAN};
float y[2] = {NAN, NAN};
float z[2] = {NAN, NAN};
float t[2] = {NAN, NAN};
PHG4HitDefs::keytype hitid = ULONG_LONG_MAX;
int trackid = INT_MIN;
int showerid = INT_MIN;
float edep = NAN;

//! container for additional property
prop_map_t prop_map;
```

Can we generate MC-DAC scan data for the DAC scan analysis code development?

INTT module in GEANT4 macro

```
// Initialize the selected subsystems
G4Init(); // if (Enable::INTT) InttInit(); // set parameters to BlackHole parameters

//-----
// GEANT4 Detector description
if (!Input::READHITS) G4Setup(); // if (Enable::INTT) radius = Intt(g4Reco, radius);
//                               // PHG4InttSubsystem* sitrack = new PHG4InttSubsystem("INTT", vpair);
//-----
// Detector Division
if (Enable::INTT_CELL) Intt_Cells();
// if (G4INTT::InttDeadMapOption != G4INTT::kInttNoDeadMap)
//     PHG4InttDeadMapLoader* deadMapINTT = new PHG4InttDeadMapLoader("INTT");
//
// PHG4InttHitReco* reco = new PHG4InttHitReco(); // // new storage containers
// PHG4InttDigitizer* digiintt = new PHG4InttDigitizer(); // // new containers

//-----
// SVTX tracking
if(Enable::TRACKING_TRACK) TrackingInit();
if(Enable::INTT_CLUSTER) Intt_Clustering(); // InttClusterizer* inttclusterizer = new InttClusterizer("InttClusterizer",
// G4MVTX::n_maps_layer, G4MVTX::n_maps_layer + G4INTT::n_intt_layer - 1);
if(Enable::TRACKING_TRACK) Tracking_Reco();
```

2022/6/22