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Getting started with Gaudi and building tools

Outline

- **1. Introduction**
- **2. Configuration and Build system**
- **3. Printing and Job Options**
- **4. Accessing Event Data**
- **5. Histograms and N-tuples**
- **6. Creating Objects and Writing Data**
- **7. Using Algorithm Tools**
- **8. Writing Physics Tools**

Aims for the Tutorial

At the end of the day you should:

- **Be more familiar with Gaudi terms and concepts**
- **Be able to start code development of reconstruction algorithms within Gaudi**
- **Be able to write simple analysis programs using the available facilities**
- **Be able to start developing *Physics Tools* to be added in the collaboration ToolBox**

Methodology

- **Short presentations**
- **Emphasis on exercises**
  - **Start with an (almost) empty file**
  - **Work towards a fully featured application**
  - **New concepts and components introduced at each step along the way**
- **Distribute and document examples for self-training as well**

Logistics

- **We will use the LXPLUS public service for the Tutorial**
  - **Everybody should have an account**
- **Two people per station**
- **The working directory will be in your AFS home directory**
  - **~/tutorial**
- **Set environment by executing**
  - **> source $LHCBHOME/scripts/tutorial.csh**

Tentative Schedule (Day 1)

9:15	1 Introduction	P. Mato
9:45	2 Configuration & Build System (*Exercises*)	P. Mato
	10:30 Coffee Break	
11:00	3 Printing and Job Options (*Exercises*)	M. Frank
	12:30 Lunch Break	
14:00	4 Accessing Event Data *(Exercises)*	M. Frank
	15:30 Coffee Break	
16:00	5 Histograms and N-tuples (*Exercises*)	M. Frank

Tentative Schedule (Day 2)

9:15	6 Creating Objects and Writing Data (*Exercises*)	M. Frank
	10:30 Coffee Break	
11:00	7 Using Algorithm Tools (*Exercises*)	G. Corti
	12:30 Lunch Break	
14:00	8 Writing Physics Tools (*Exercises*)	G. Corti
	15:30 Coffee Break	
16:00	(*Exercises*)	

Credits

Gaudi Team:

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Athena Team:

– **D. Quarrie, C. Tull**