

# Associative Memory computing power and its simulation



Carmela Luongo  
on behalf of the FTK Team



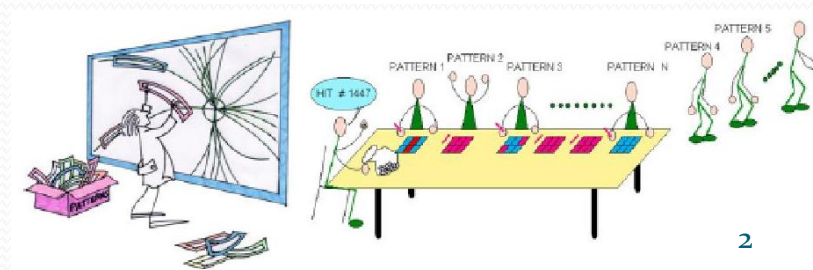
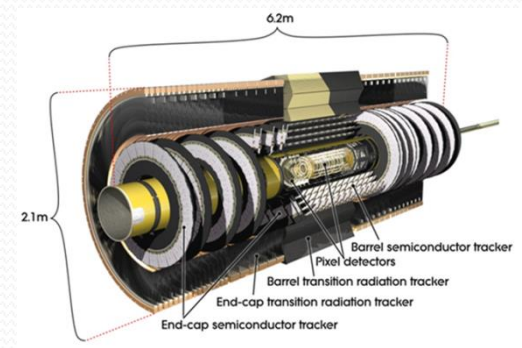
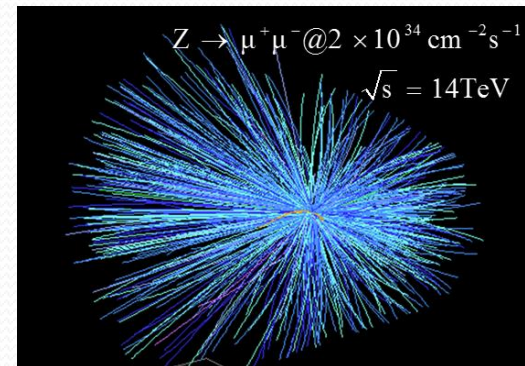
19° Real-Time Conference  
26-30 May 2014, Nara, Japan

# Introduction

## The Challenge

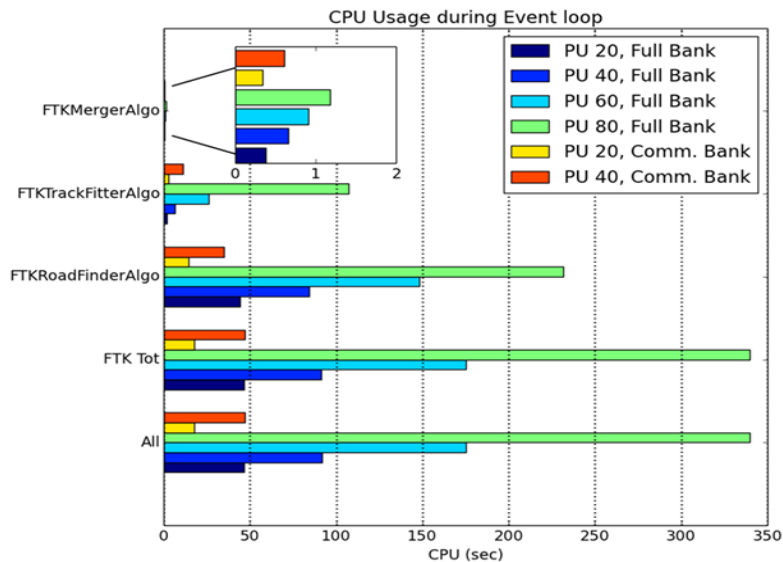
## ATLAS FTK Processor

## Associative Memory



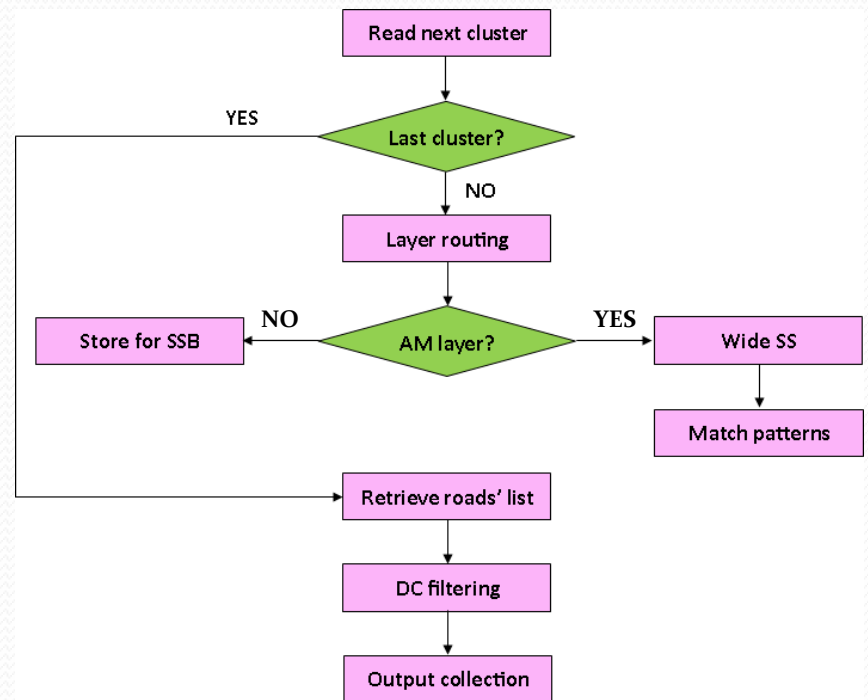
# FTK Simulation

## CPU Time per Event of the 3 major algorithms



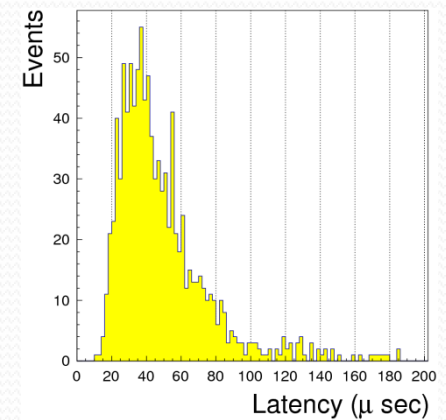
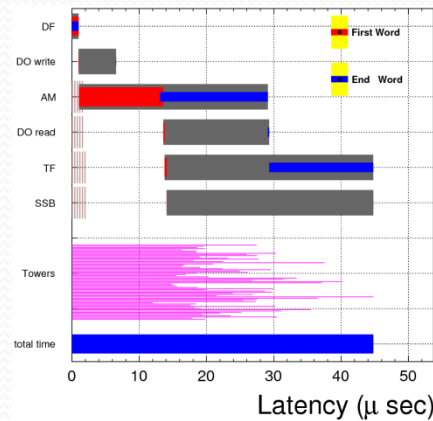
The emulation of the Road Finder dominates the overall execution time

## Road Finding Emulation



# Results

## LATENCY



## EFFICIENCY

