Visualisation System of ALICE

Shifters training

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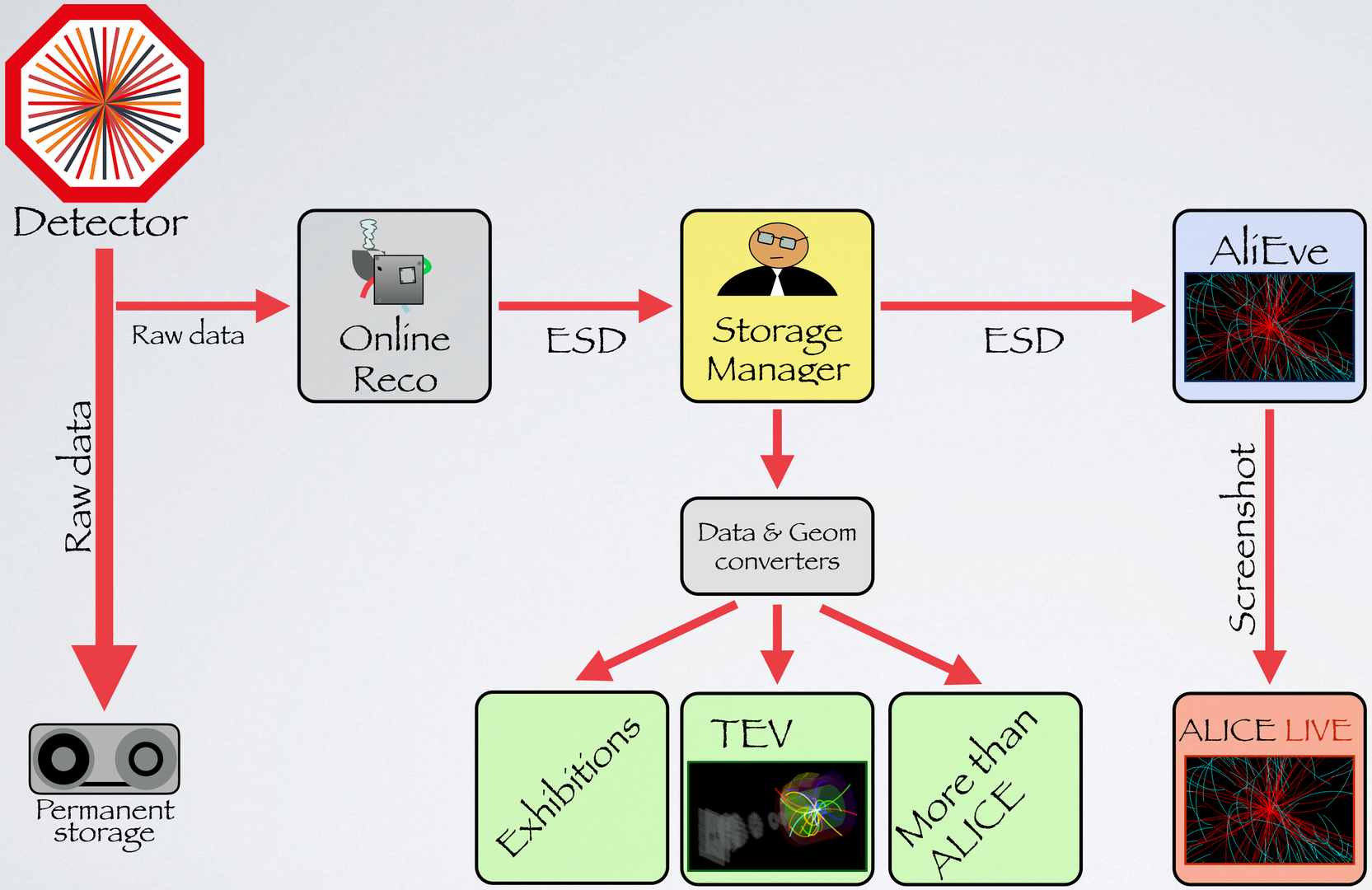
VISUALISATION SYSTEM IN ALICE



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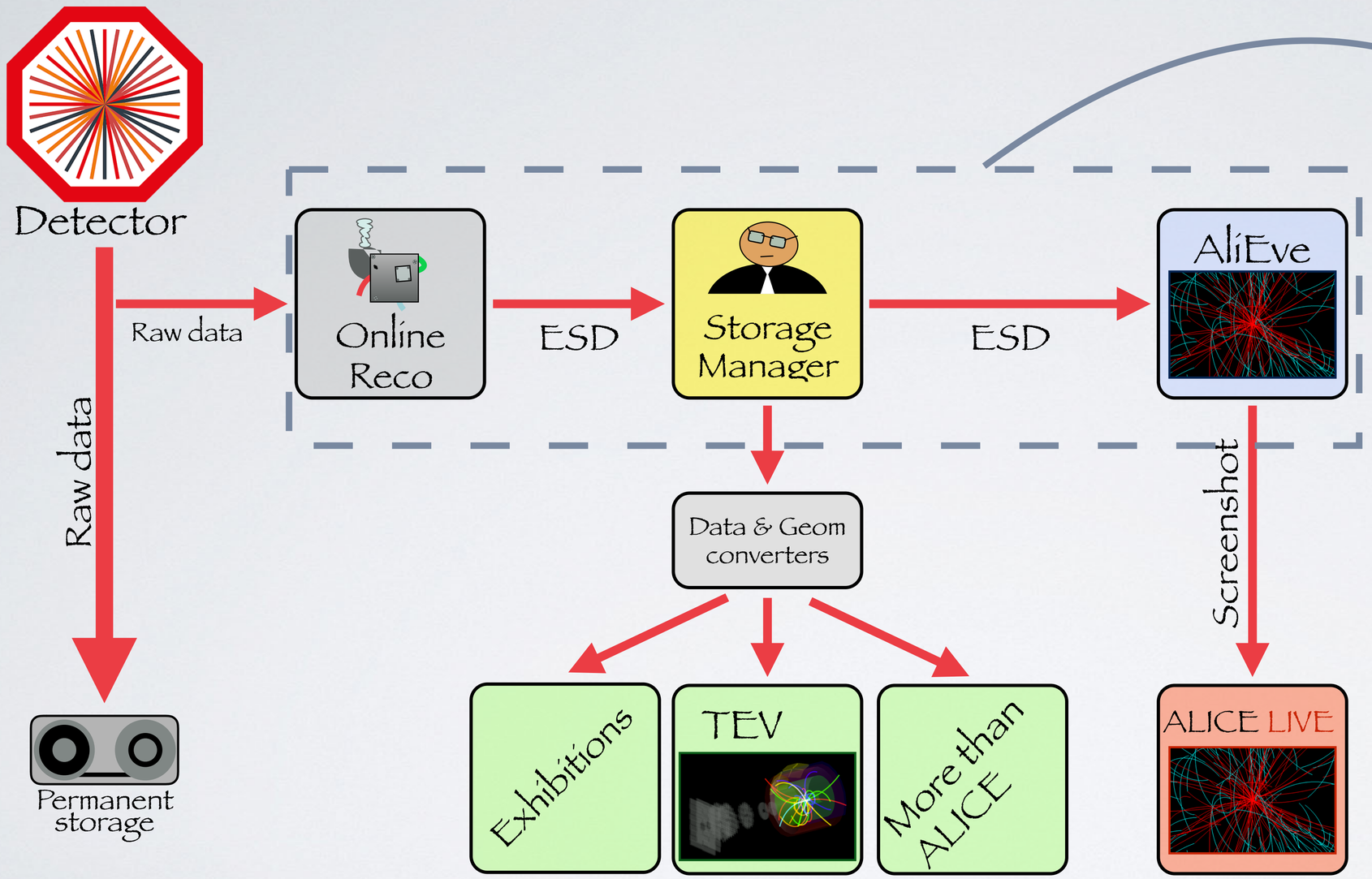
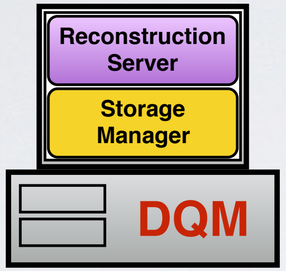


There are 3 key modules:

- Online reconstruction,
- Storage Manager,
- AliEve (Event Display).

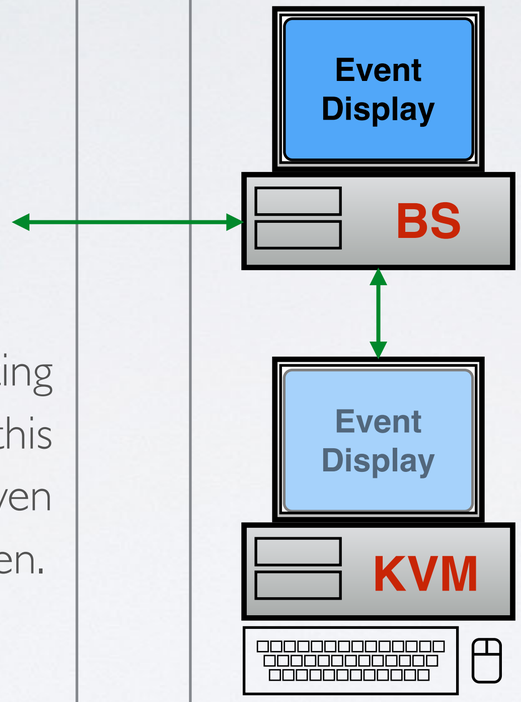
VISUALISATION SYSTEM IN P2

Counting Room



You have **no access** to Counting Room and thus no access to this machine. This machine doesn't even have a keyboard, mouse and screen.

ALICE Run Control Centre



Big Screen machine is connected to central display of control room. You have **no direct access** to this machine. It also doesn't have keyboard and mouse.

The machine in the centre of the Control Room (with KVM sticker). You should use it to **access** BS machine (so you see the same content on screen, you can move a mouse cursor and type on the keyboard).

STORAGE MANAGER

Storage Manager:

- starts/stops online reconstruction,
- collects, stores and distributes reconstructed events,
- communicates with AliEve and other client application (for example TEV).

Shifters responsibilities:

- it starts automatically - **no need to start**,
- there is a watchdog monitoring if Storage Manager is running - **no need to restart**,
- if it gets stuck - **contact ED experts**.

ONLINE RECONSTRUCTION

Online reconstruction:

- takes sample of raw data, reconstructs them and produces ESDs,
- sends ESDs to other modules,
- without reconstruction we cannot see events in AliEve.

Shifters responsibilities:

- automatically started by Storage Manager on SOR - **no need to start**,
- if it crashes or gets stuck - **contact ED experts**.

AliEve

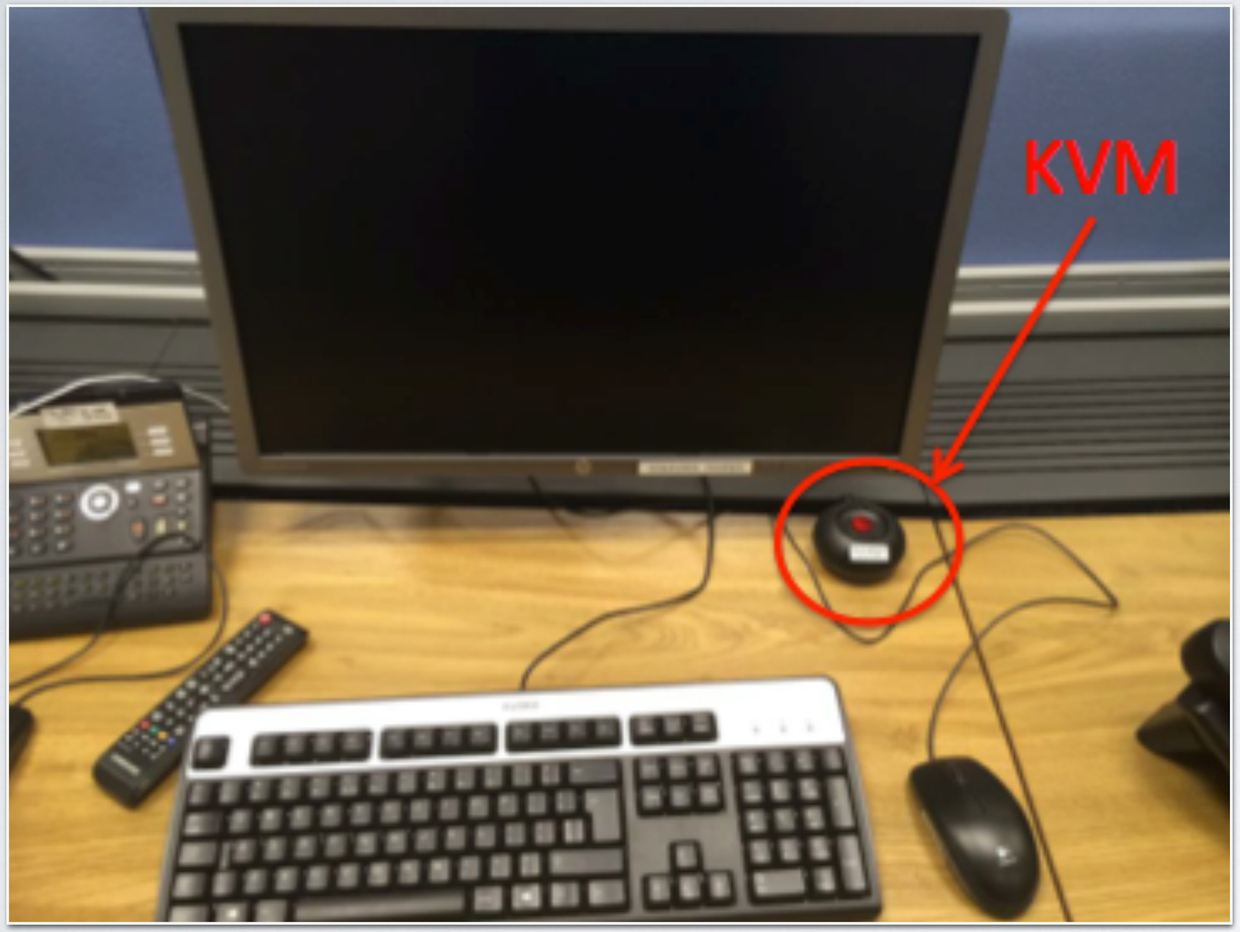
Event Display:

- receives events from Storage Manager and Online Reconstruction,
- visualises detector geometry and reconstructed events.

Shifters responsibilities:

- watchdog will restart AliEve automatically - **no need to restart**,
- if it gets stuck - **shifter should stop it manually**,
- any other problems - **contact ED experts**.

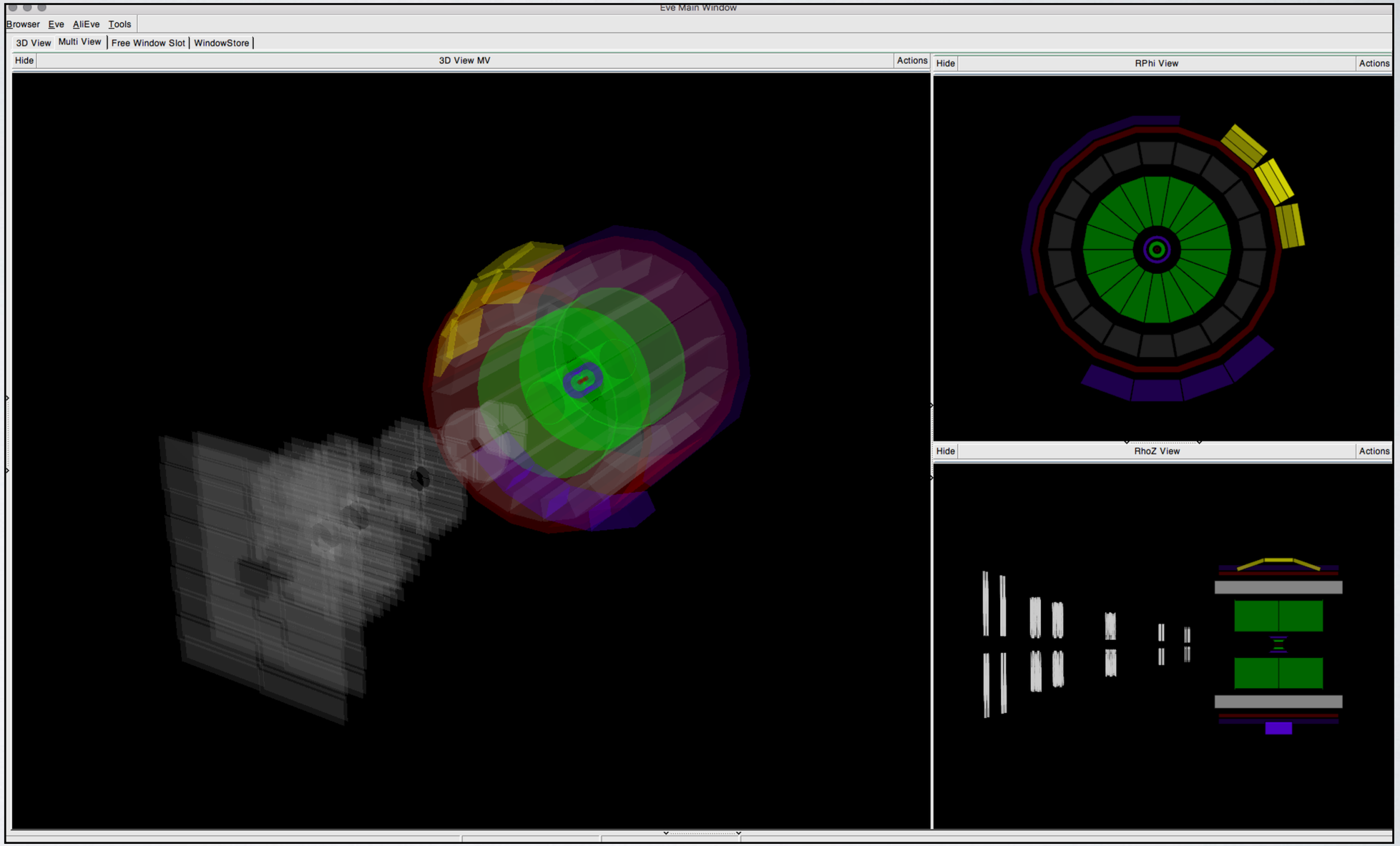
Using KVM



1) Turn on KVM machine using red button (marked on the picture).
2) Set screen's source to VGA.
3) Log in as "ARC".
4) Pick machine number 5 (central big screen).

AliEve

After successful start of Event Display you should see this:



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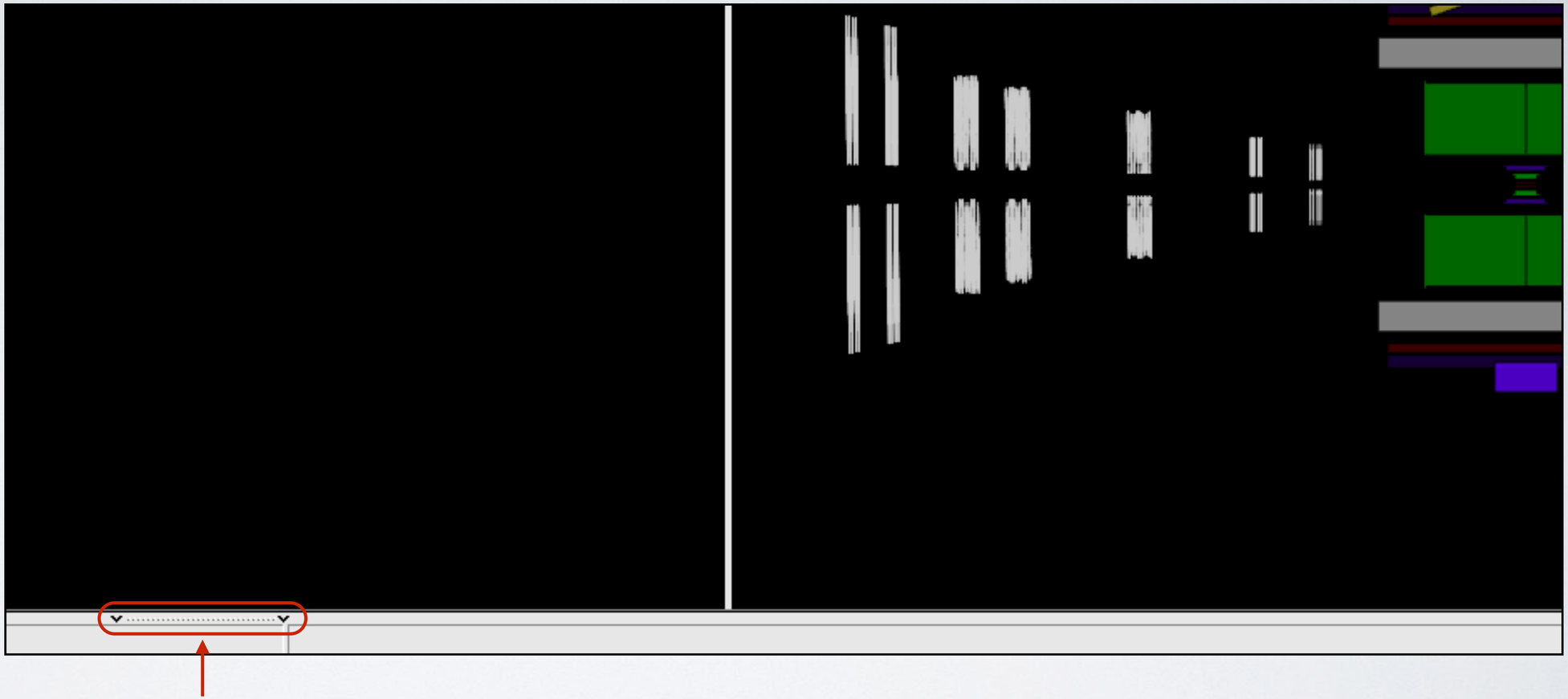

Use slider at the bottom to show navigation menu.

AliEve

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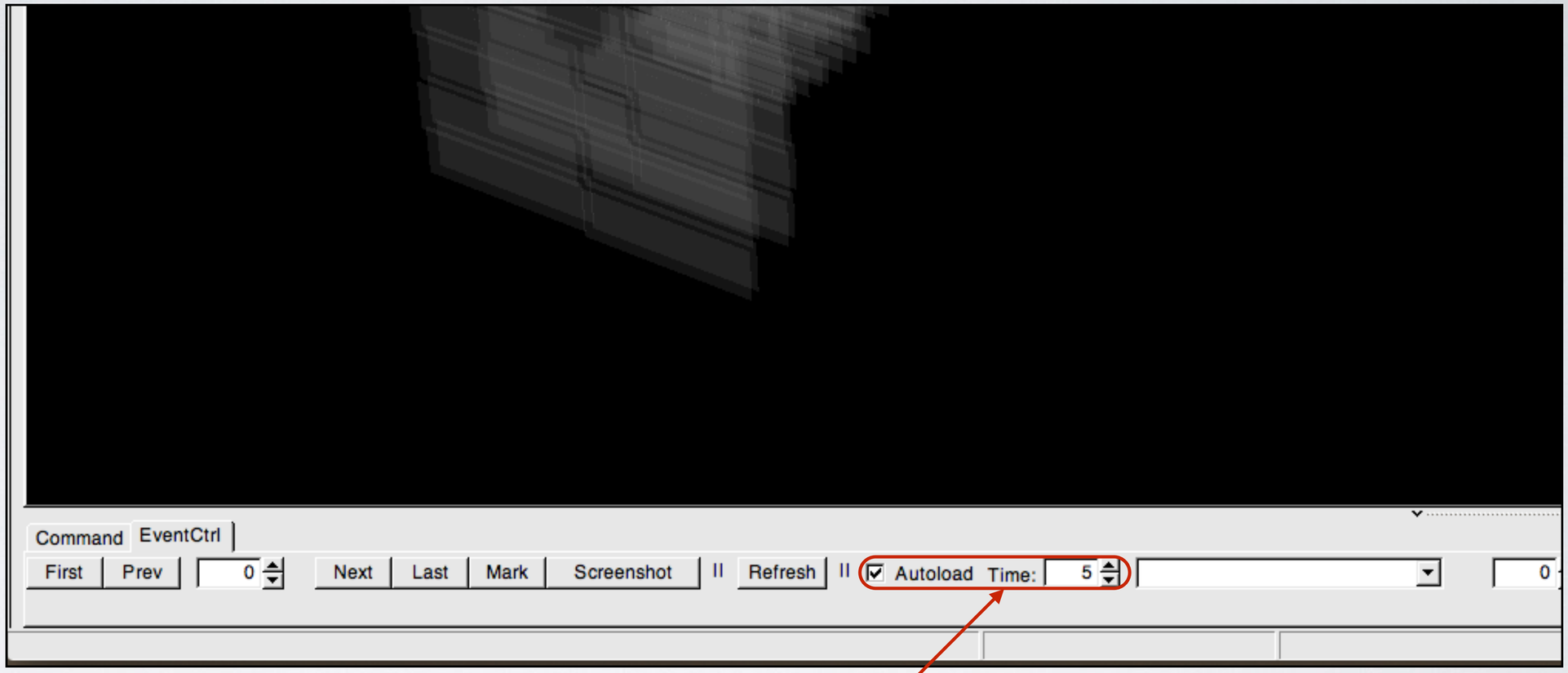


Start/stop autoload and change autoload time here.

You can also produce a screenshot using "screenshot" button.

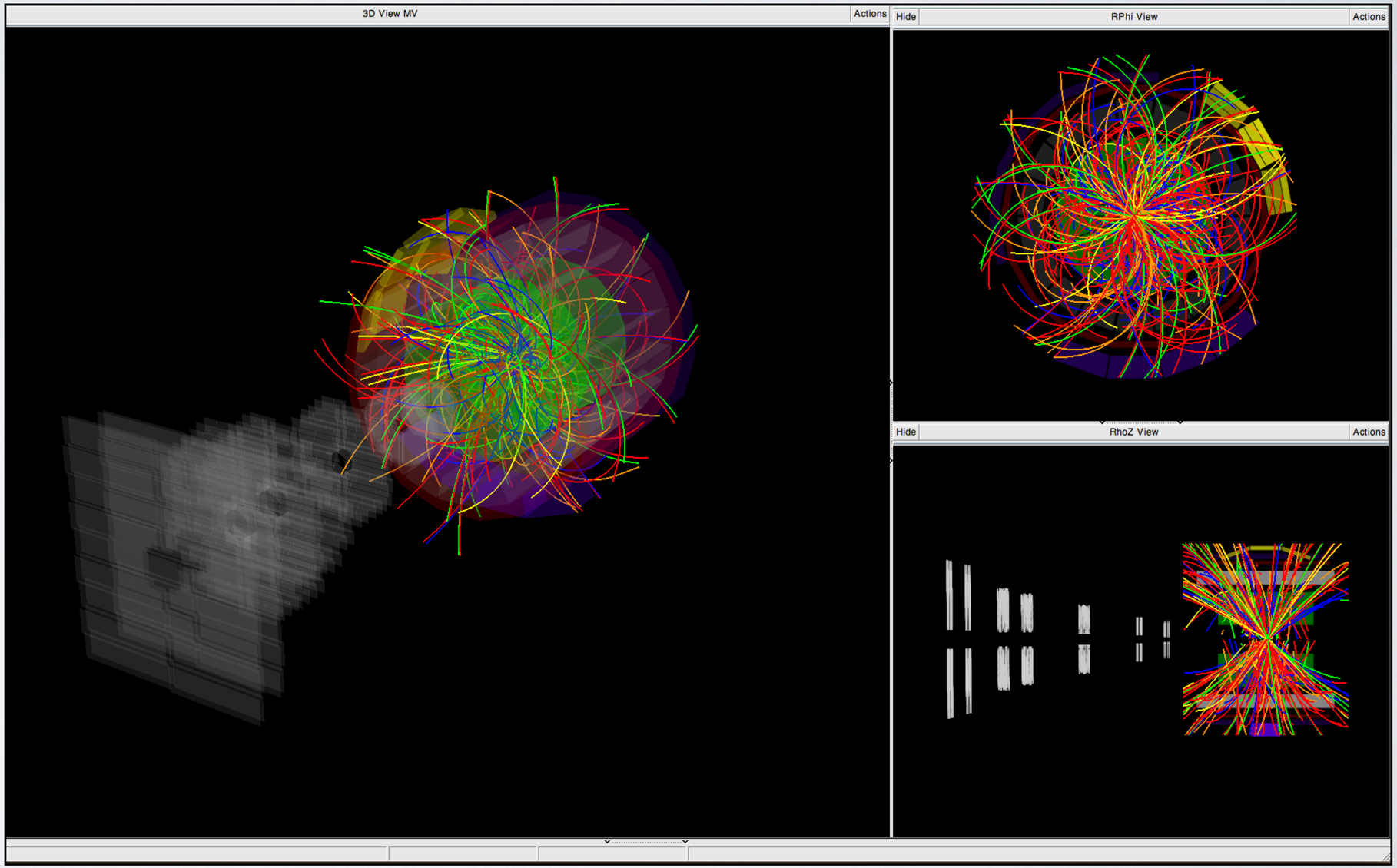
AliEve

After successful start of Event Display you should see this:

You can change a source of data here. Pick HLT to read events reconstructed by the High Level Trigger. Offline will take reconstructed files for local storage for run number indicated on the left (press "Reload" after changing this number).

AliEve

When Online Reconstruction is running, you should see tracks in the detector and they should load automatically each 5 seconds:



AliEve

If you don't see tracks, check the following:

- is there a run in PHYSICS_1 partition?
- is TPC or ITS included in the run?
- did the run start more than 5 minutes ago?
- is Event Display frozen?

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none of the above? - **contact ED experts**

Summary

1) Make sure, that Event Display is running. If it cannot load for a long time, or you see it's frozen - close the window (or attached to it terminal window) and wait until it restarts automatically.
2) Observe Event Display to determine status of whole system. If you suspect something does not work properly - contact experts!
3) Be patient - crashed module will be restarted after one minute, initialisation of it may take 2-3 minutes - give it a bit of time.

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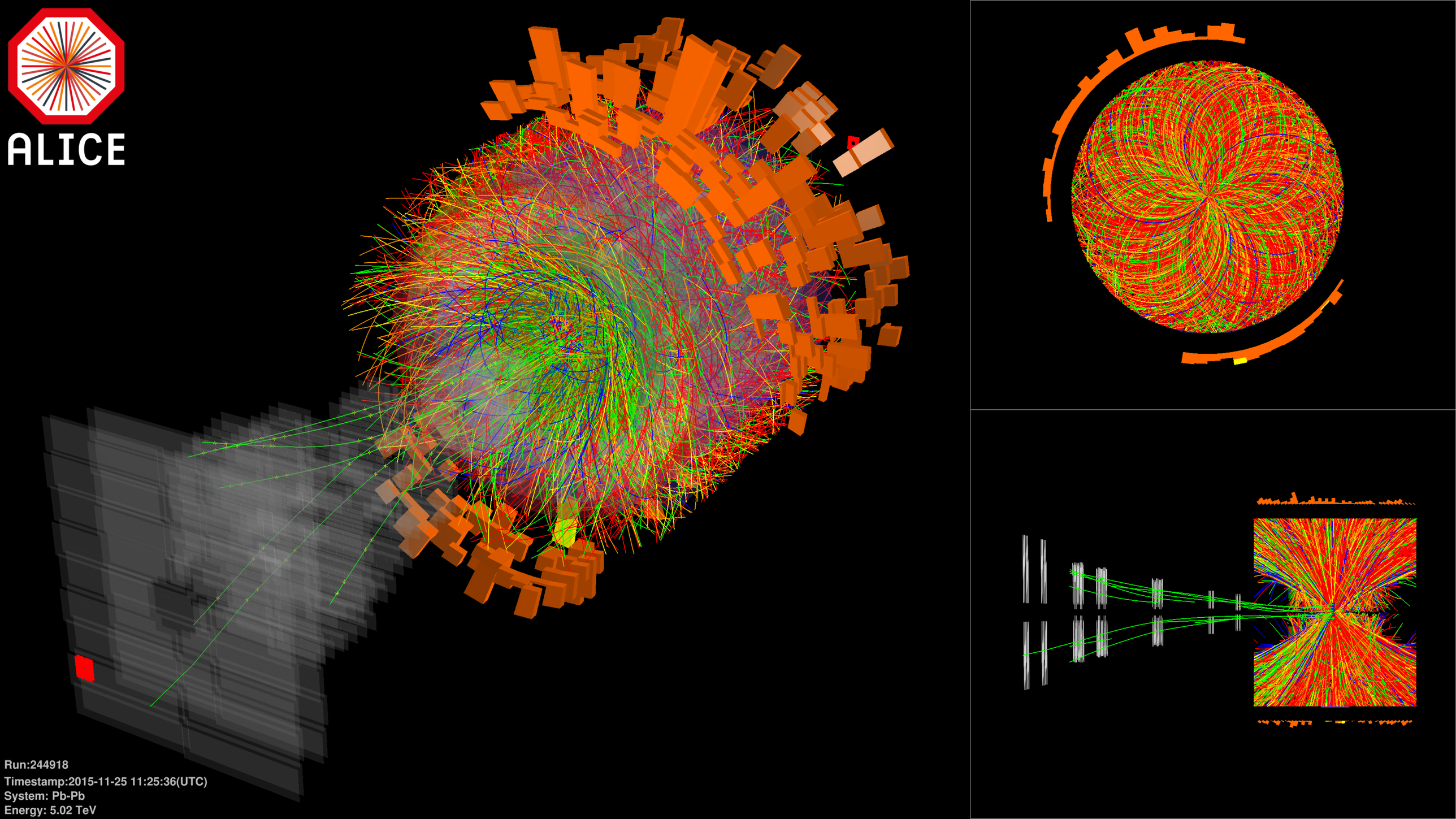
ALICE
Run:244918
Timestamp:2015-11-25 11:25:36(UTC)
System: Pb-Pb
Energy: 5.02 TeV