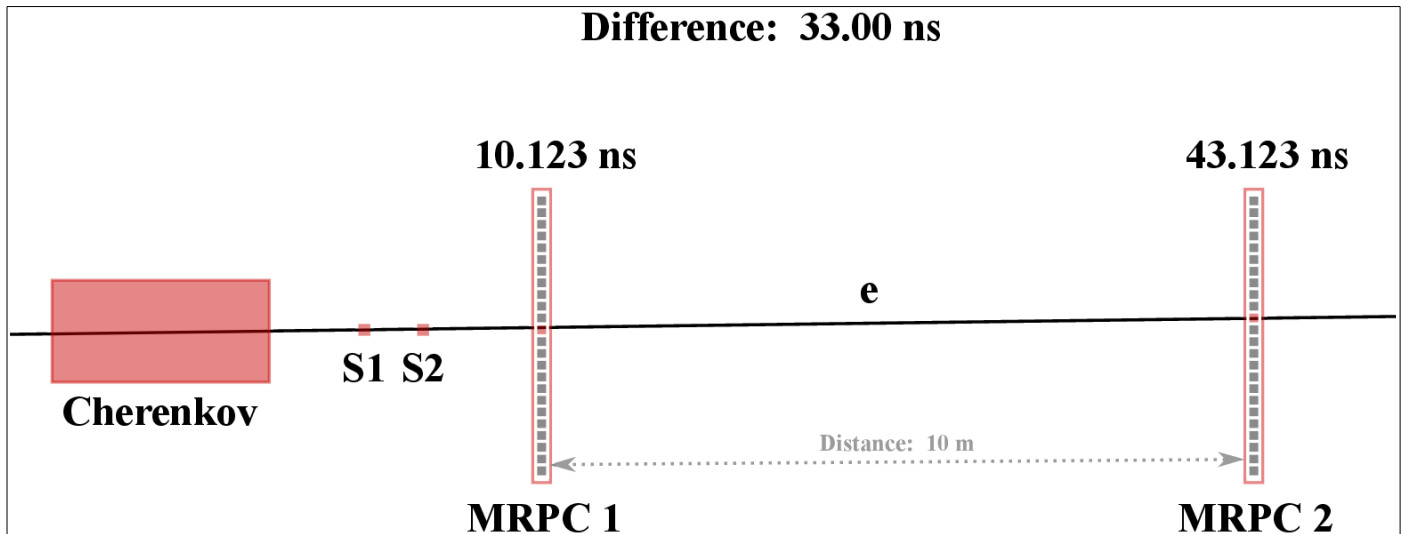


Specyfication of TOF experiment LabView Event Viewer.

An example how an EventViewer should looks like.



The distance between MRPCs should be calculated using `tof_experiment.geo` geometry file (MRPC0X_POS).

The following table shows what constants and variables are needed. Constants can be hard-coded in the LabView code, whereas Variables should be read from an event file.

Constants		Variables	
ElectronMass	0.000511	BeamMomentum	e.g. 2.5
MuonMass	0.105	MRPC_1	Time value (ns)
PionMass	0.14	MRPC_2	Time value (ns)
ProtonMass	0.938	MRPC_1_strip	Strip number, counting from the "top" (max. 24 strips)
DeuteronMass	1.875	MRPC_2_strip	
KaonMass	0.493		
TOF_e[2]	Time range (mean_per_meter, std_dev) of each particle e.g. mean = 3.33333376853 std_dev = 0.000001		
TOF_mu[2]			
TOF_pion[2]			
TOF_proton[2]			
TOF_deuteron[2]			
TOF_kaon[2]			

An example event, shown on a picture above (CSV format with a header):

BeamMomentum (GeV); MRPC_1 (ns); MRPC_1_strip; MRPC_2 (ns); MRPC_2_strip;
2.5; 10.123; 12; 43.123; 11;

The MRPC strips:

