

At the beginning of Code - Outside the Event Loop

```
# include "BEC4.h"
```

```
float *temp_run = new float();  
*temp_run = 1.0;  
float *temp_ecorr = new float();  
*temp_ecorr = 1.0;
```

```
.....  
.....
```

Enter the Event Looping

```
FRUN = Current_Run_Number;  
FIn_BeamE = Incoming_Beam.E();
```

```
if ( *temp_run != FRUN )  
{  
    *temp_run = FRUN;  
    *temp_ecorr = Get_ECorr_Factor(FRUN);  
    //cout << "nE_Corr : RUN :: " << *temp_ecorr << " : " << *temp_run << endl;  
}
```

```
nE_Corr = *temp_ecorr;  
//cout << "nE_Corr : RUN :: " << nE_Corr << " : " << FRUN << endl;
```

```
nBEC_beamE = FIn_BeamE * nE_Corr; // New Corrected Beam Energy
```

```
// New_Beam = New beam 4-vector after BEC  
// New_MM = New Missing Mass because of the New beam  
// P4vector[0,1,2] are the original detected particle 4-vectors which dont change  
// For example, in my case 0=proton, 1= Kplus, 2=Kminus
```

```
New_Beam.SetXYZT(0.0,0.0,nBEC_beamE,nBEC_beamE); // New Beam 4-Vector  
New_MM=New_Beam+target4v-P4vector[1]-P4vector[2]-P4vector[0]; // new Missing Mass
```

```
.....  
.....
```