

Jan 09, 15 10:50

CaloHit.hh

Page 1/2

```
//
// *****
// * License and Disclaimer *
// *
// * The Geant4 software is copyright of the Copyright Holders of *
// * the Geant4 Collaboration. It is provided under the terms and *
// * conditions of the Geant4 Software License, included in the file *
// * LICENSE and available at http://cern.ch/geant4/license . These *
// * include a list of copyright holders. *
// *
// * Neither the authors of this software system, nor their employing *
// * institutes, nor the agencies providing financial support for this *
// * work make any representation or warranty, express or implied, *
// * regarding this software system or assume any liability for its *
// * use. Please see the license in the file LICENSE and URL above *
// * for the full disclaimer and the limitation of liability. *
// *
// * This code implementation is the result of the scientific and *
// * technical work of the GEANT4 collaboration. *
// * By using, copying, modifying or distributing the software (or *
// * any work based on the software) you agree to acknowledge its *
// * use in resulting scientific publications, and indicate your *
// * acceptance of all terms of the Geant4 Software license. *
// *****
//

#ifndef CaloHit_h
#define CaloHit_h 1

#include "G4VHit.hh"
#include "G4THitsCollection.hh"
#include "G4Allocator.hh"

class CaloHit : public G4VHit
{
public:
    CaloHit();
    // CaloHit(G4String volume);
    CaloHit(G4int DetID);
    ~CaloHit();
    CaloHit(const CaloHit &right);
    const CaloHit& operator=(const CaloHit &right);
    G4int operator==(const CaloHit &right) const;

    inline void *operator new(size_t);
    inline void operator delete(void *aHit);

    void Draw();
    void Print();

private:
    // G4String VolumeID;
    G4int DetID;
    G4double totalEdep;
    std::map<G4int,G4double> edep;

public:
    // inline void SetVolumeID(G4String volume)
    inline void SetDetID(G4int det)
    {
        // VolumeID = volume;
        DetID = det;
    }
    void SetEdep(G4double de,G4int tkID);
    void AddEdep(G4double de,G4int tkID);
    inline G4double GetTotalEdep()
    { return totalEdep; }
    inline std::map<int,double> GetEdepMap(){return edep;}
};
```

Jan 09, 15 10:50

CaloHit.hh

Page 2/2

```
G4double GetEdep(G4int tkID);
// inline const G4String GetVolume()
inline G4int GetVolume()
{ return DetID; }
// { return VolumeID; }

};

typedef G4THitsCollection<CaloHit> CaloHitsCollection;

extern G4Allocator<CaloHit> CaloHitAllocator;

inline void* CaloHit::operator new(size_t)
{
    void *aHit;
    aHit = (void *) CaloHitAllocator.MallocSingle();
    return aHit;
}

inline void CaloHit::operator delete(void *aHit)
{
    CaloHitAllocator.FreeSingle((CaloHit*) aHit);
}

#endif
```