

# G4HadronicStoppingProcess

Reminder:

- G4HSP inherits from **G4HadronicProcess** (G4HP)
- ... which inherits from **G4VDiscreteProcess**

G4HSP wants to be *G4VRestProcess*

- Currently reset *protected* flags from **G4VProcess**
- Fools ProcessManager into treating as AtRest only

Better to do protected-flag management directly and explicitly in G4HP

## Process-type Flags

Inherit G4HP from **G4VRestDiscreteProcess**

Add **G4HadronicProcessType** as ctor arg(\*)

Move SetProcessSubType() calls from subclasses

Use sub-type to modulate **G4VProcess** flags

\* Why does G4HP have **G4ProcessType** ctor arg? Should a G4HP subclass ever say it's *not* fHadronic?

## Modify G4VProcess Flags

```
void G4HadronicProcess::SetVProcessDoItFlags(G4HadronicProcessType hadType) {
    switch (hadType) {
        case fHadronElastic:
        case fHadronInelastic:
        case fCapture:
        case fFission:
        case fChargeExchange:    enableAtRestDoIt = false; break;
        case fHadronAtRest:      enablePostStepDoIt = false; break;
        case fRadioactiveDecay:  break;
        default: ;
    }
}
```

Call from G4HP ctor, passing sub-type ctor argument