

Hands-on exercises

Unit 2

Modelling the experimental set-up

What you learned in unit 2 lectures

- How to describe an experimental environment with Geant4
- Your experimental set-up
 - Materials
 - *Elements, simple, compound*
 - Detector geometry
 - *Solid, logical volume, physical volume*
- Your radiation environment
 - Primary particle generation
 - *Simple particle gun, General Particle Source etc.*

Today's exercises

- You start from a simple user application we provide
- You get familiar with it through a guided tour we provide
- You learn how to build and run it as is
- You play with predefined commands

- You modify some features
- You add new functionality

- We propose the exercises
- You get some time to solve them by yourself
- We show you the solution

Topics for the exercise

● Materials

- Define a new material
- Define a compound

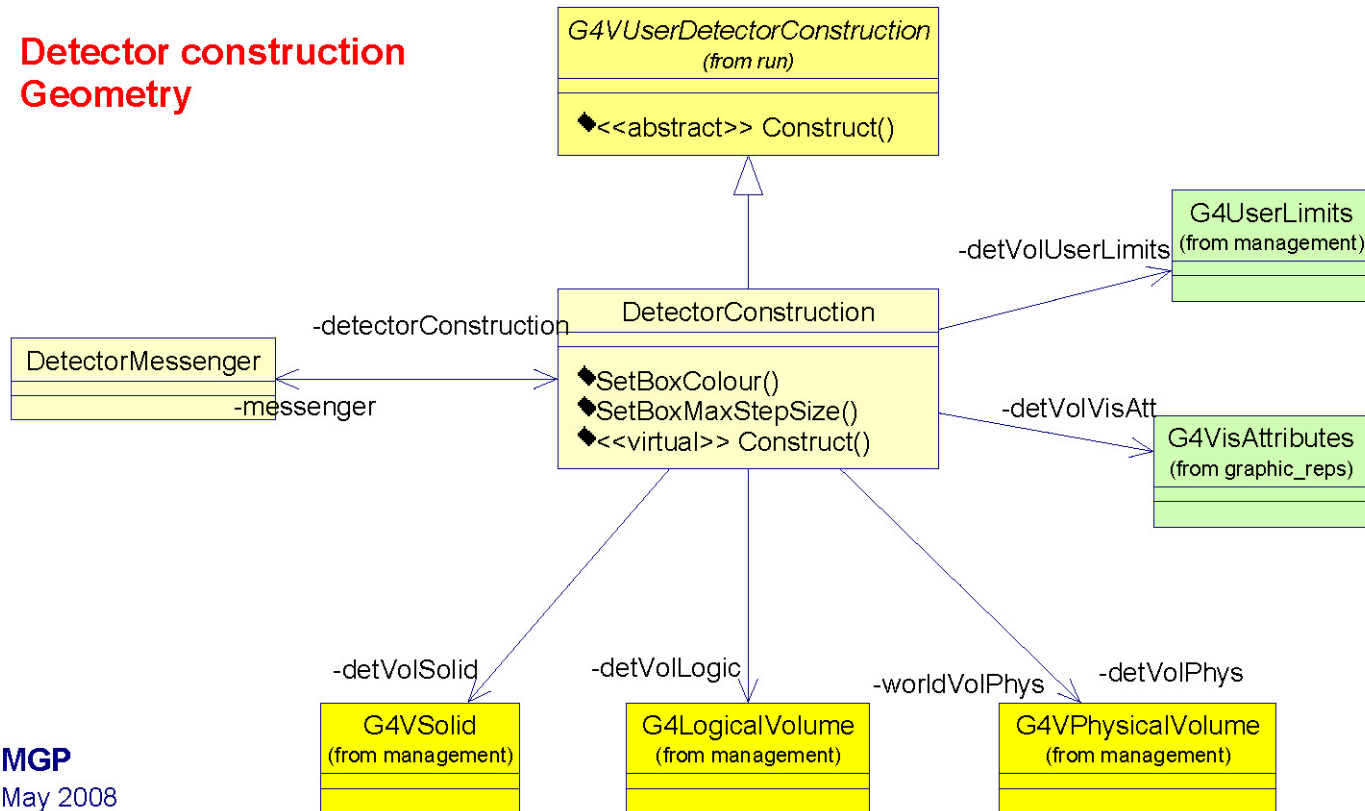
● Geometry

- Modify the existing detector
- Add a new component to your setup

● Primary generator

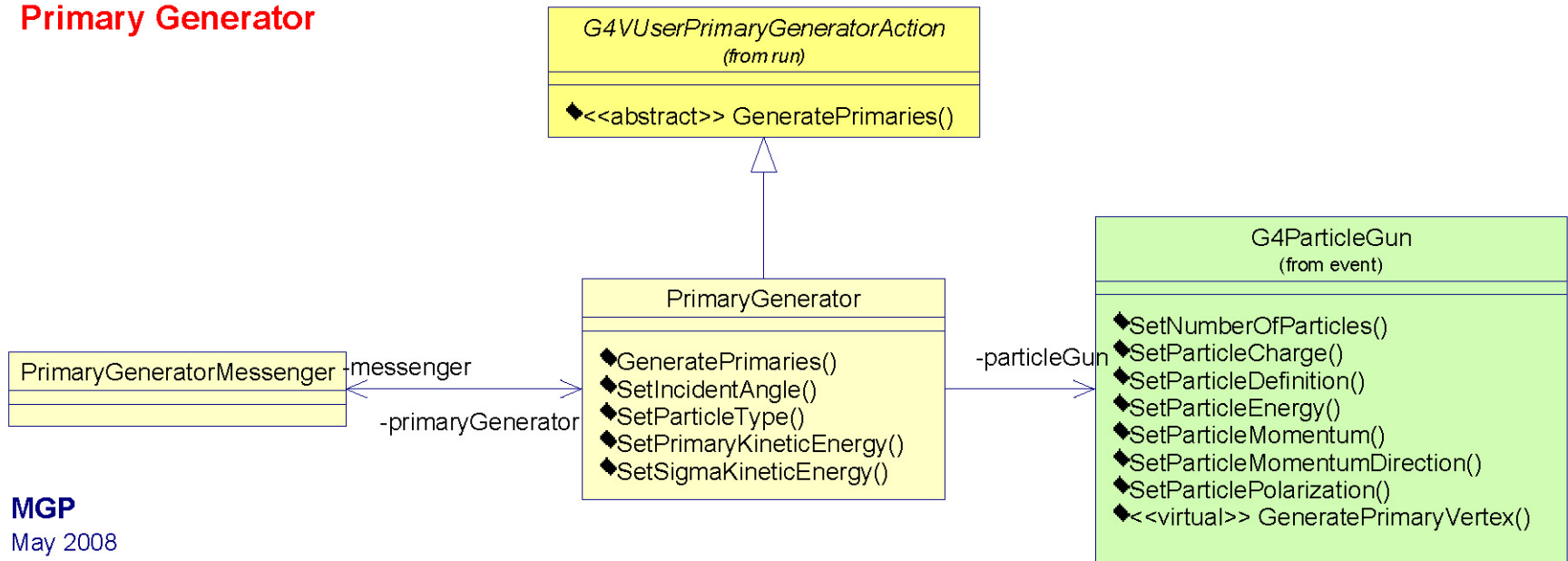
- Modify the characteristics of your primary beam

Detector construction Geometry



MGP
May 2008

Primary Generator



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