

# How do I get the magnetic field?

In general you should get the detector from the event, and the field map from the detector. If you only want the Z field, and you are prepared to assume the field is constant (since we don't have a detailed field map that is probably a good approximation) you can use:

```
Hep3Vector ip = new BasicHep3Vector();
double zField = event.getDetector().getFieldMap().getField(ip).z();
```

or more fully

```
import hep.physics.vec.BasicHep3Vector;
import hep.physics.vec.Hep3Vector;
import org.lcsim.event.EventHeader;
import org.lcsim.util.Driver;

public class FieldDriver extends Driver
{
    private static final Hep3Vector ip = new BasicHep3Vector();

    public void process(EventHeader event)
    {
        double zField = event.getDetector().getFieldMap().getField(ip).z();
    }
}
```

For more information see [FieldMap](#)