

# Teilchenphysik-Masterclass / Event-Display

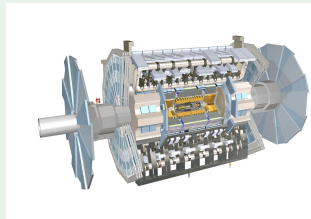
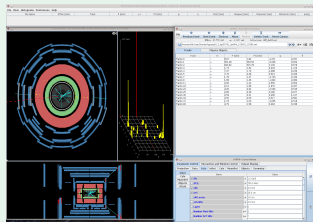
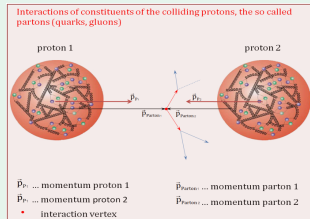
Michael Bender

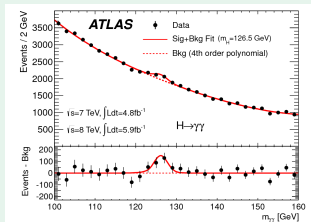
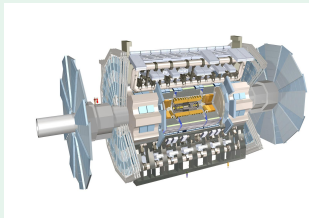
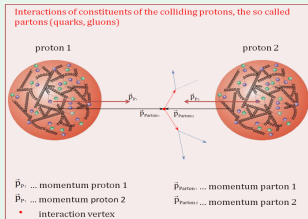
Bachelor-Einführungskurs

08. Apr. 2014



# Proton-Proton-Kollisionen am LHC / Event-Display



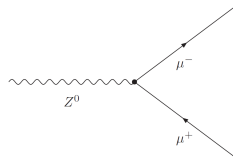
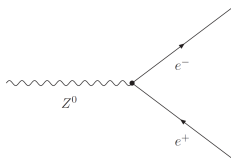


## Zerfall eines Z-Bosons

$$Z \rightarrow e^- e^+$$

$$Z \rightarrow \mu^- \mu^+$$

...

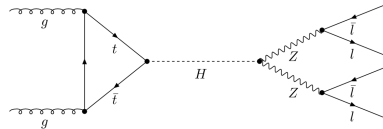
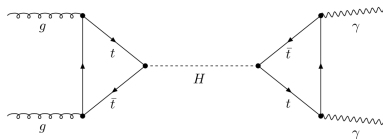


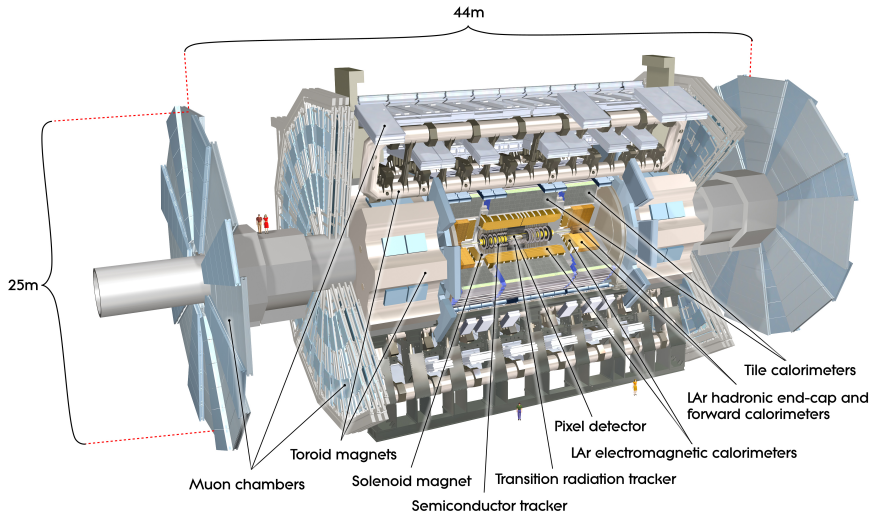
## Zerfall eines Higgs-Bosons

$$H \rightarrow \gamma\gamma$$

$$H \rightarrow ZZ^* \rightarrow l^+ l^- l^+ l^-$$

...





Link zur Homepage der Teilchenphysik Masterclass:

<http://atlas.physicsmasterclasses.org/de/zpath.htm>

### Hypatia Event-Display

```
cp -r /project/etp/masterclass/hypatia/ .
```

```
cd hypatia
```

```
./HYPATIA_for_Linux.sh
```

Einlesen der Event-Files

File -> Read Event Locally

eine Ebene nach oben navigieren

10 Events zum Üben:

exercise2\_Z.zip

zusätzlich 50 Events:

0\_Z.zip

