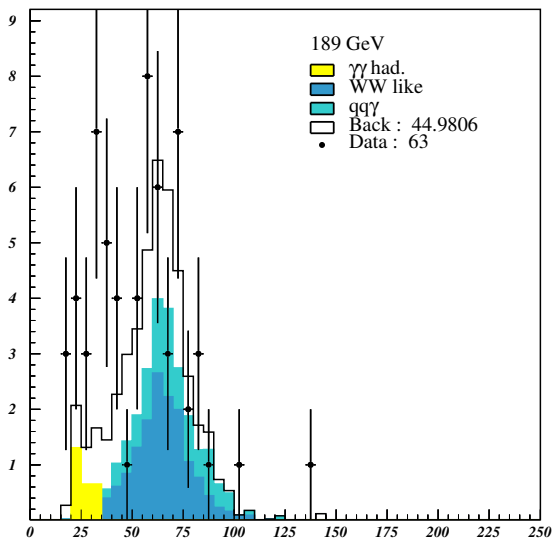
OPAL analysis

OPAL selection:

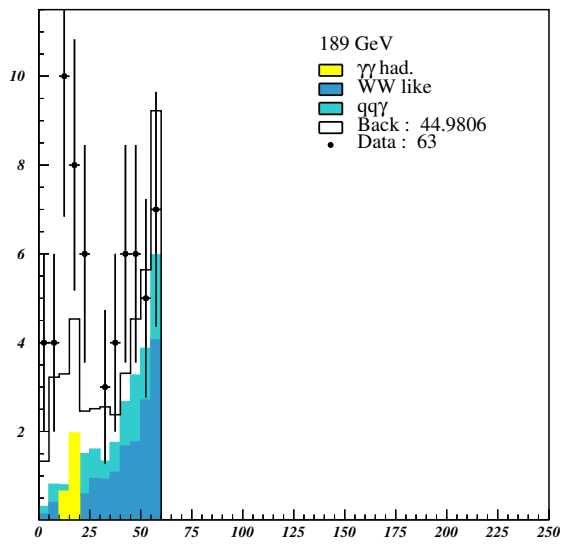
- **SUSANA pre-selection:**
  - **at least 1 charged particle**
  - $E_t > 4$
  - **at least 1 particle with** $P_t > 1.5$
- **OPAL pre-selection:**
  - **At least 4 charged particle**
  - **% of rejected tracks < 20 %**
  - $E_{STIC} \leq 5$
  - $E_{30}/E_{vis} < 0.9$
- **OPAL cuts:**
  - $|\cos(\theta P_{miss})| < 0.9$
  - $P_t^{mis} > 14.$
  - $|\cos(\theta jet1and2)| < 0.95$ **(Durham)**
  - **Acoplanarity** ≥ 15
  - $Ycut_{2-3} \times E_{vis}^2 < 50.$ **(against** $WW \rightarrow q\bar{q}l\nu$**)**
  - $M_{vis} \leq 60.$

Results at 189 GeV

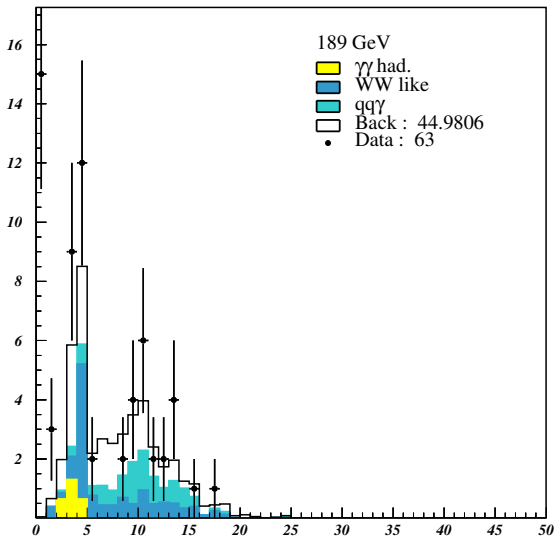
Ndata = 63, Nmc = 45.



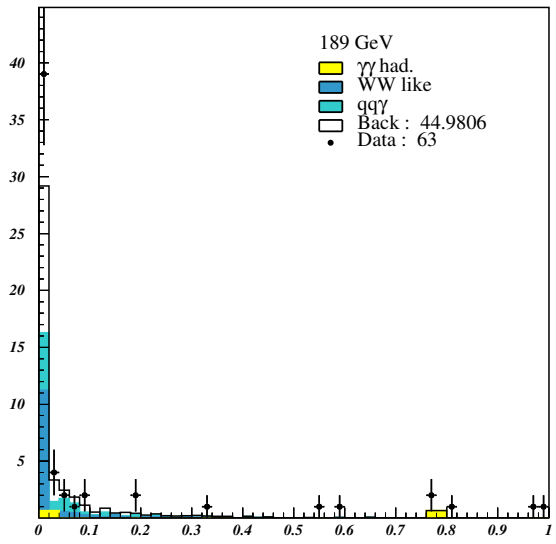
Visible Energy



Mvis



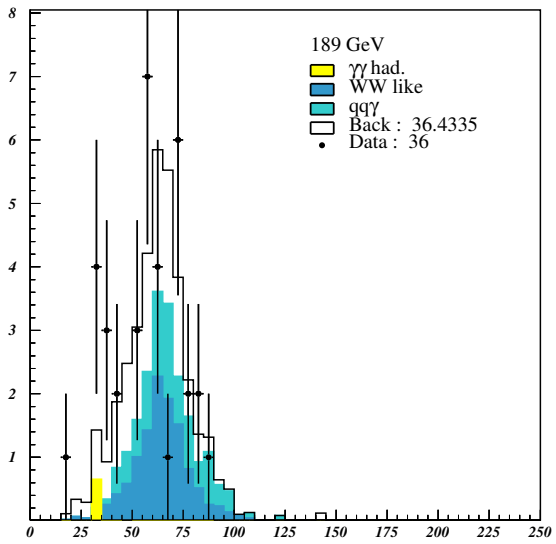
N tpc



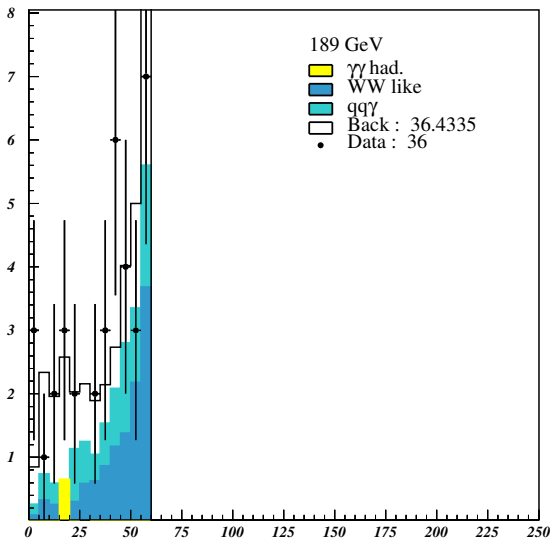
EVDID/Evis

Results at 189 GeV

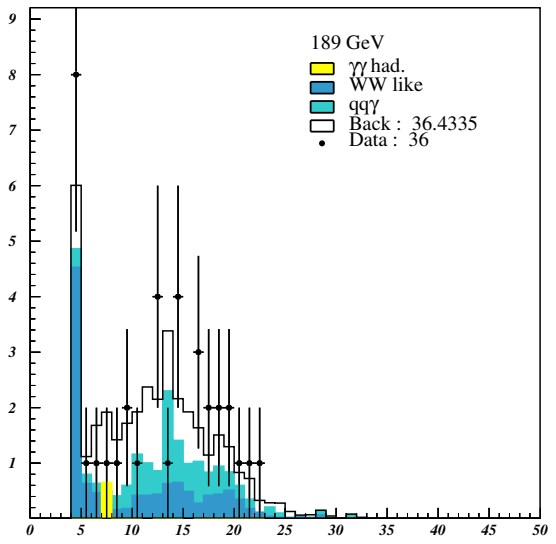
OPAL cuts + Ntpc (4pads) > 4
Ndata = 36, Nmc = 36.



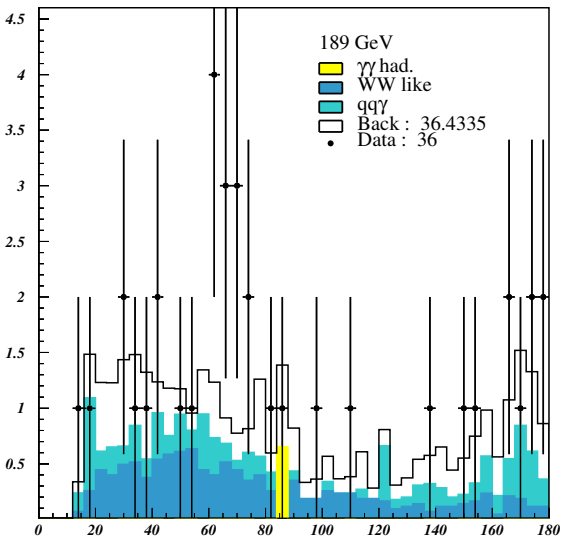
Visible Energy



Mvis



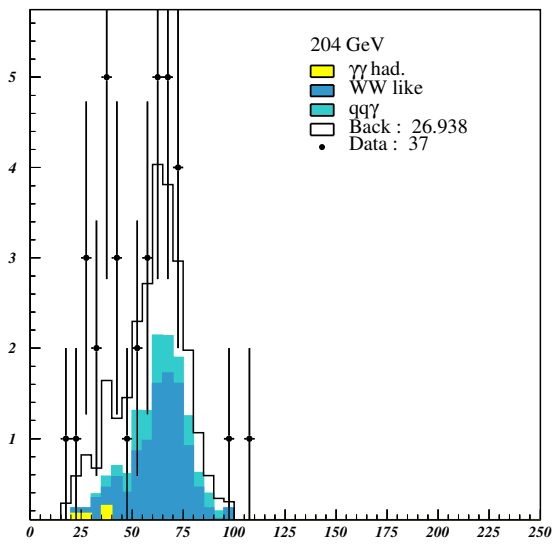
Number of charged particles



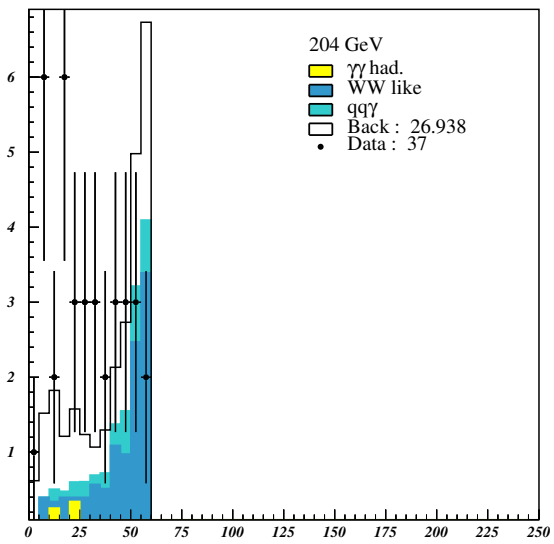
Coplanarity

Results at 204 GeV

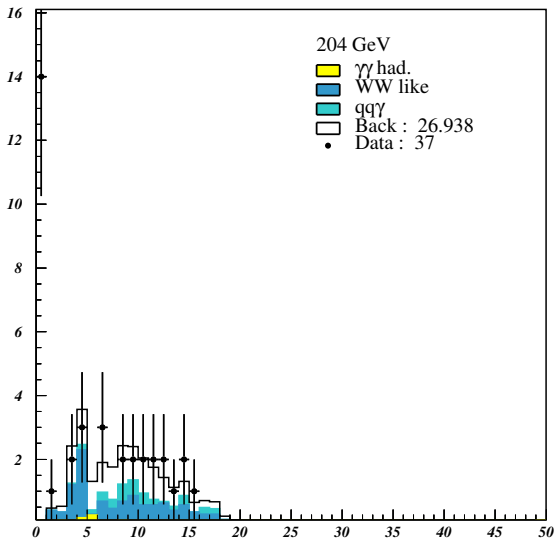
Ndata = 37, Nmc = 27.



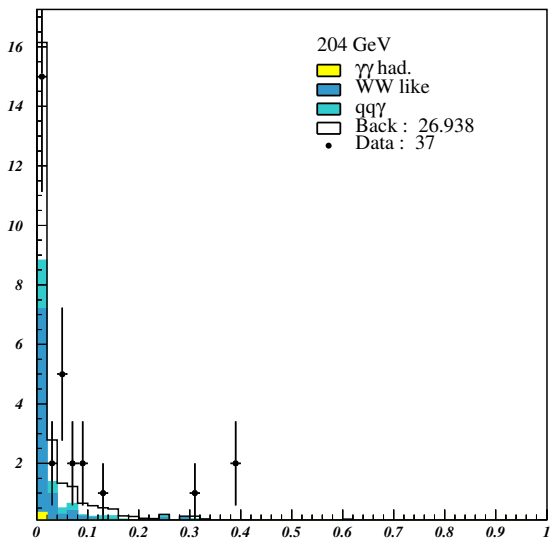
Visible Energy



Mvis



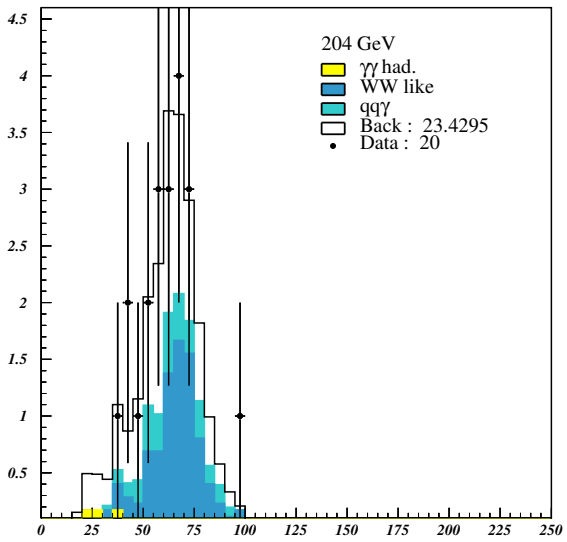
N tpc



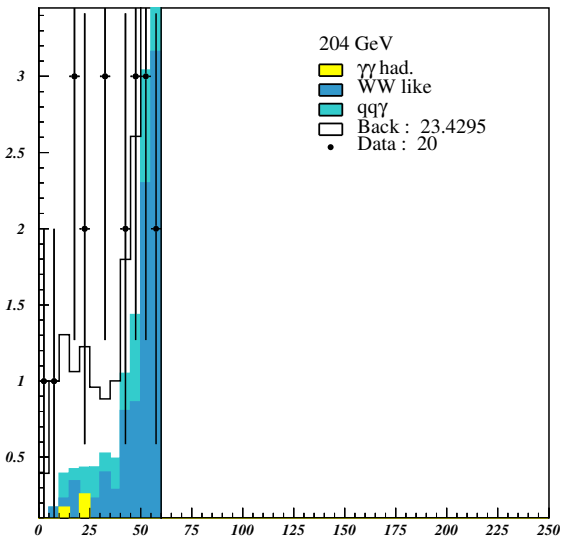
EVDID/Evis

Results at 204 GeV

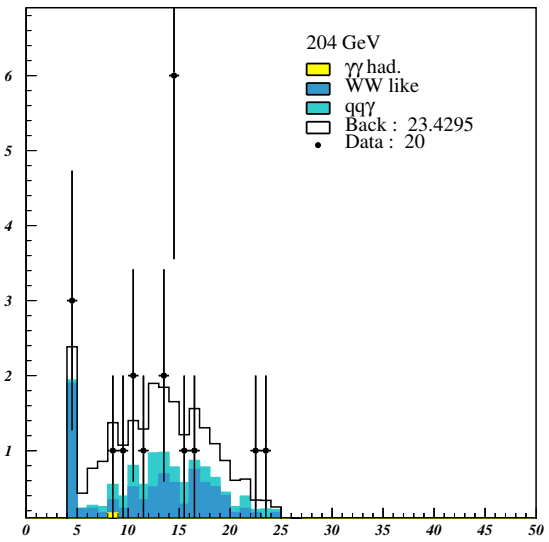
OPAL cuts + Ntpc (4pads) > 4
Ndata = 20, Nmc = 23.



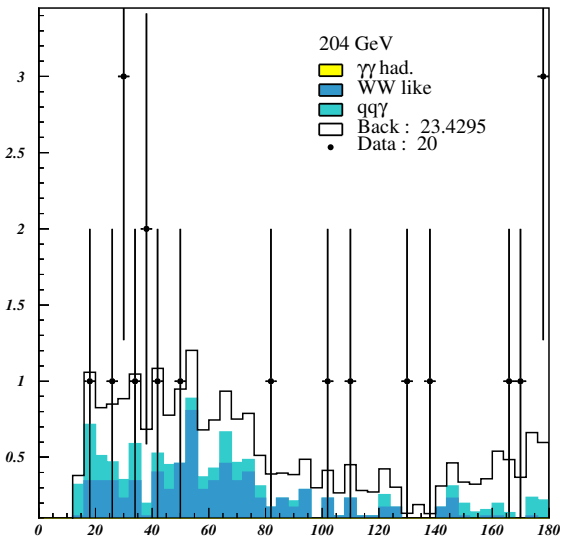
Visible Energy



Mvis



Number of charged particles



Coplanarity