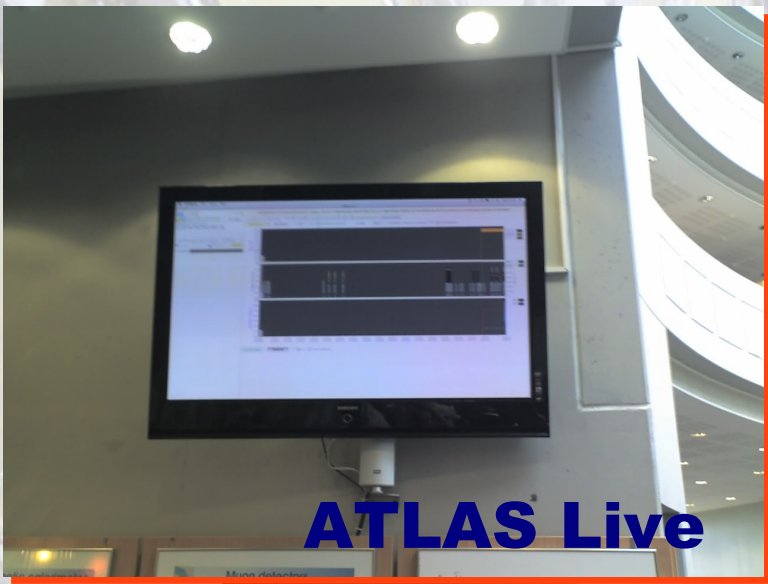




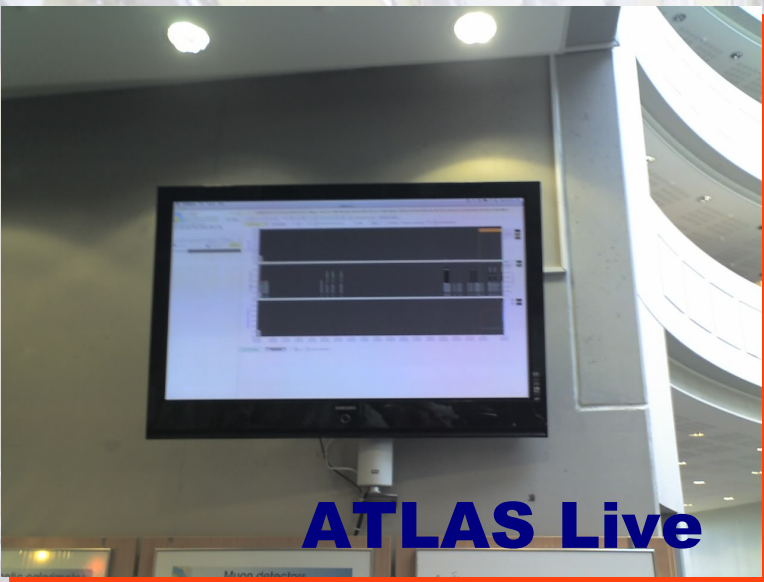
ATLAS Live
Muon Spectrometer Channel
and Higgs Search

J.J. Stankowicz – University Of Florida
Under the guidance of Dr. Steve Goldfarb
and Dr. Jonas Strandberg

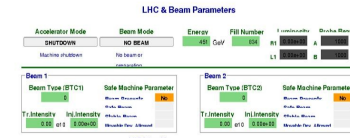


ATLAS Live





LHC - Beam Conditions

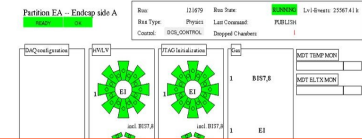


AGENDA

- March 19, 2009
- Do fake things
- September 15, 2009



Muon Drift Tubes - Final State Machine - Endcap A

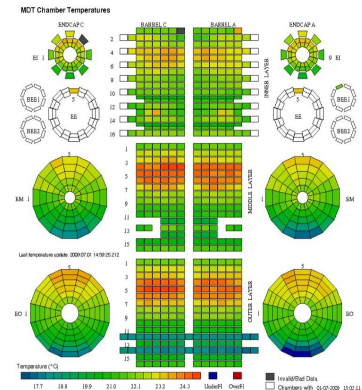


AGENDA

- Do fake things
- September 15, 2009
- Do fake things



Muon Drift Tubes - Detector Control System - Temperatures



AGENDA

- Ate candy
- This is a fake agenda
- March 19, 2009
- Do fake things
- September 15, 2009
- Do fake things
- December 25, 2009
- Celebrate Christmas
- Sometime in October(?)
- Collide particles

15:02:06
1 July 2009

http://pcatdwww.cern.ch/atlas-point1/dcs/data/snapshots/MDT_INF.png

Images from the channel

Setting up the channel





- | | |
|----------------|-------------|
| Argentina | Morocco |
| Armenia | Netherlands |
| Australia | Norway |
| Austria | Poland |
| Azerbaijan | Portugal |
| Belarus | Romania |
| Brazil | Russia |
| Canada | Serbia |
| Chile | Slovakia |
| China | Slovenia |
| Colombia | Spain |
| Czech Republic | Sweden |
| Denmark | Switzerland |
| France | Taiwan |
| Georgia | Turkey |
| Germany | UK |
| Greece | USA |
| Israel | CERN |
| Italy | JINR |
| Japan | |

ATLAS Collaboration



Argentina
 Armenia
 Australia
 Austria
 Azerbaijan
 Belarus
 Brazil
 Canada
 Chile
 China
 Colombia
 Czech Republic
 Denmark
 France
 Georgia
 Germany
 Greece
 Israel
 Italy
 Japan

Morocco
 Netherlands
 Norway
 Poland
 Portugal
 Romania
 Russia
 Serbia
 Slovakia
 Slovenia
 Spain
 Sweden
 Switzerland
 Taiwan
 Turkey
 UK
 USA
 CERN
 JINR

**ATLAS
Collaboration**




**ATLAS
Collaboration**

Argentina	Morocco
Armenia	Netherlands
Australia	Norway
Austria	Poland
Azerbaijan	Portugal
Belarus	Romania
Brazil	Russia
Canada	Serbia
Chile	Slovakia
China	Slovenia
Colombia	Spain
Czech Republic	Sweden
Denmark	Switzerland
France	Taiwan
Georgia	Turkey
Germany	UK
Greece	USA
Israel	CERN
Italy	JINR
Japan	



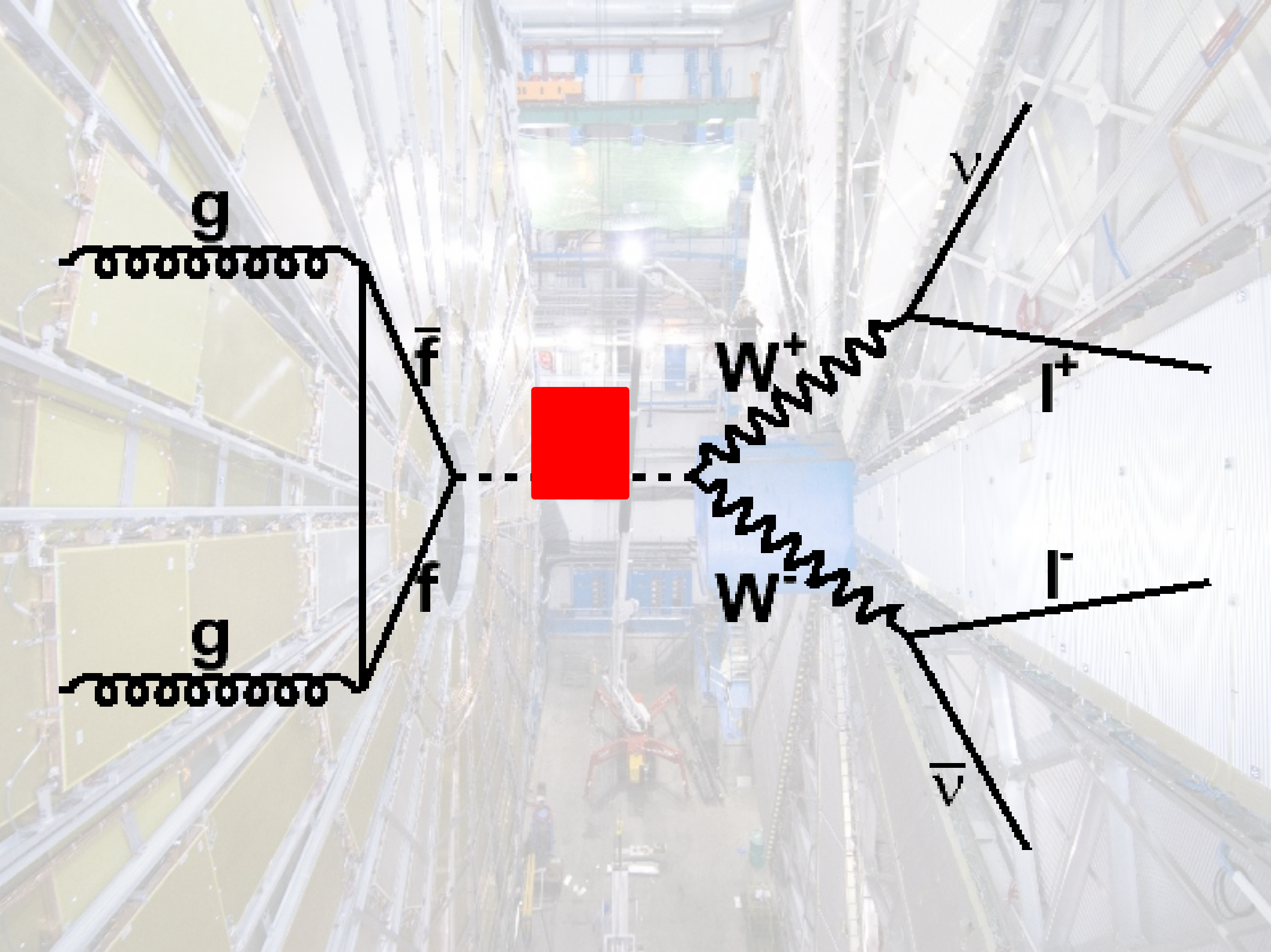


Muon Spectrometer Channel:

<http://test-atlaslive.web.cern.ch/test-atlaslive/>

ATLAS IT Public Displays FAQ:

<https://espace.cern.ch/AVC-workspace/publicscreens/Lists/FAQ/AllItems.aspx>



g

g

\bar{f}



W^+

W^-

l^+

l^-

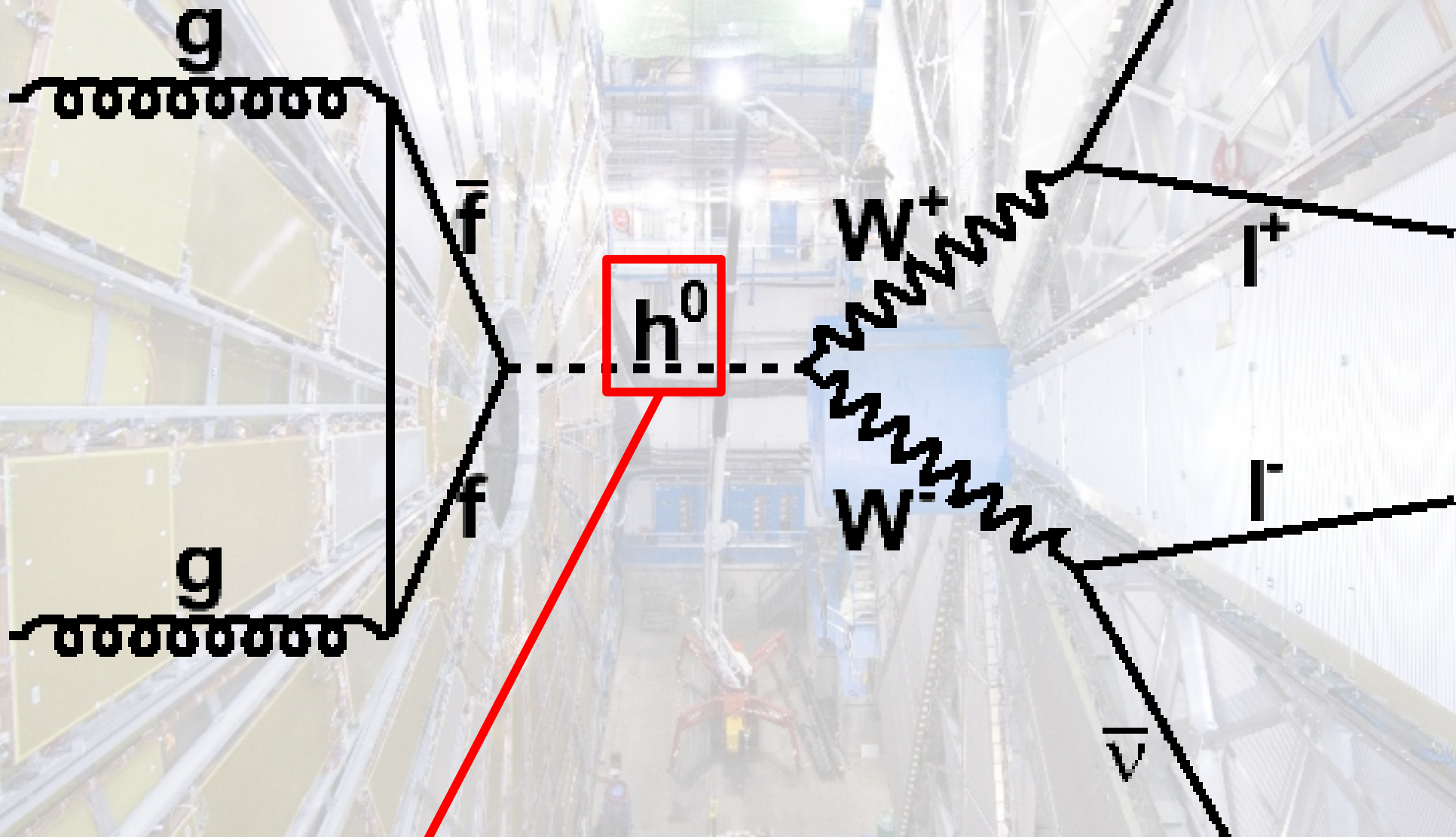
g

g

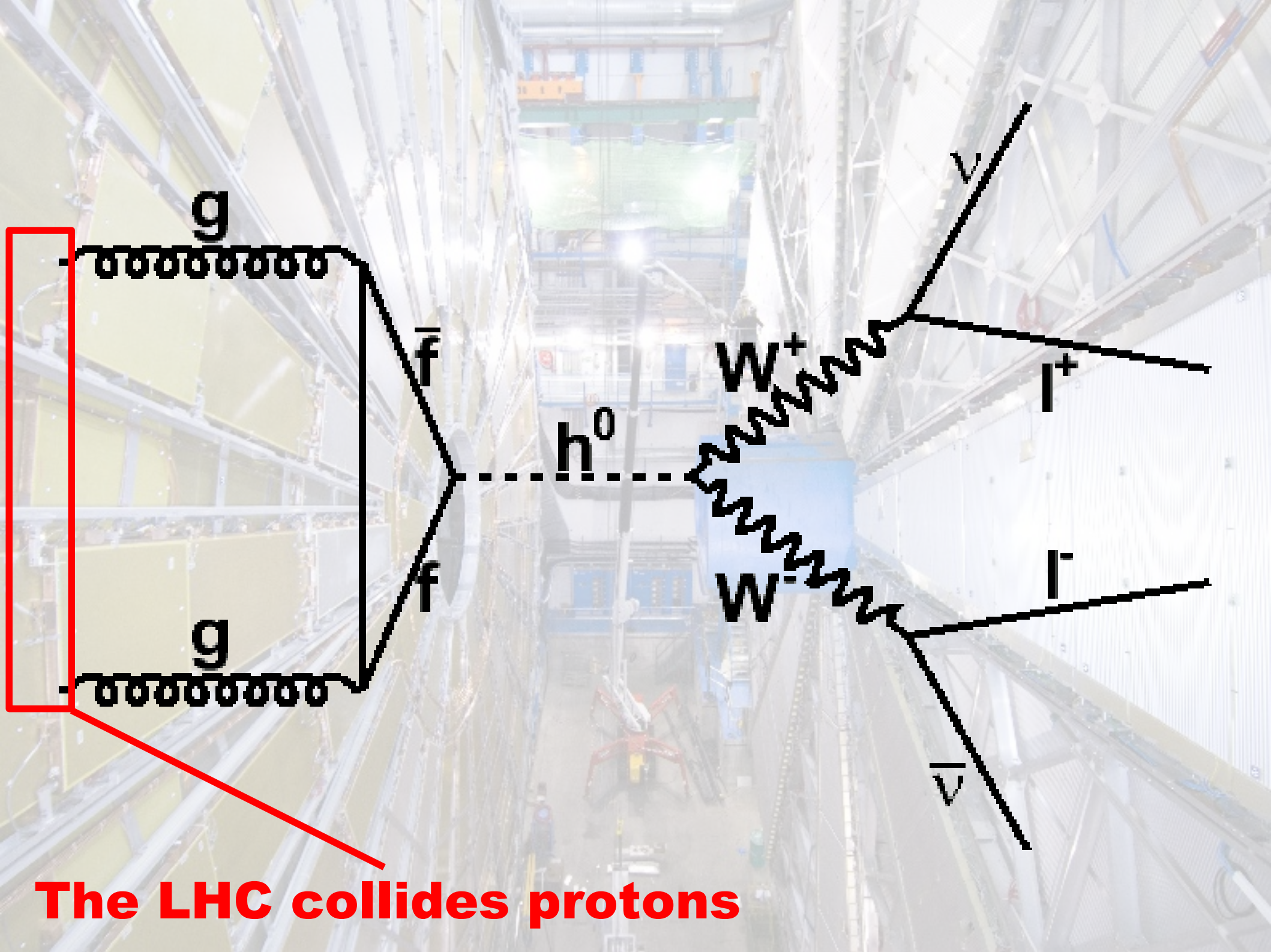
f

W^-

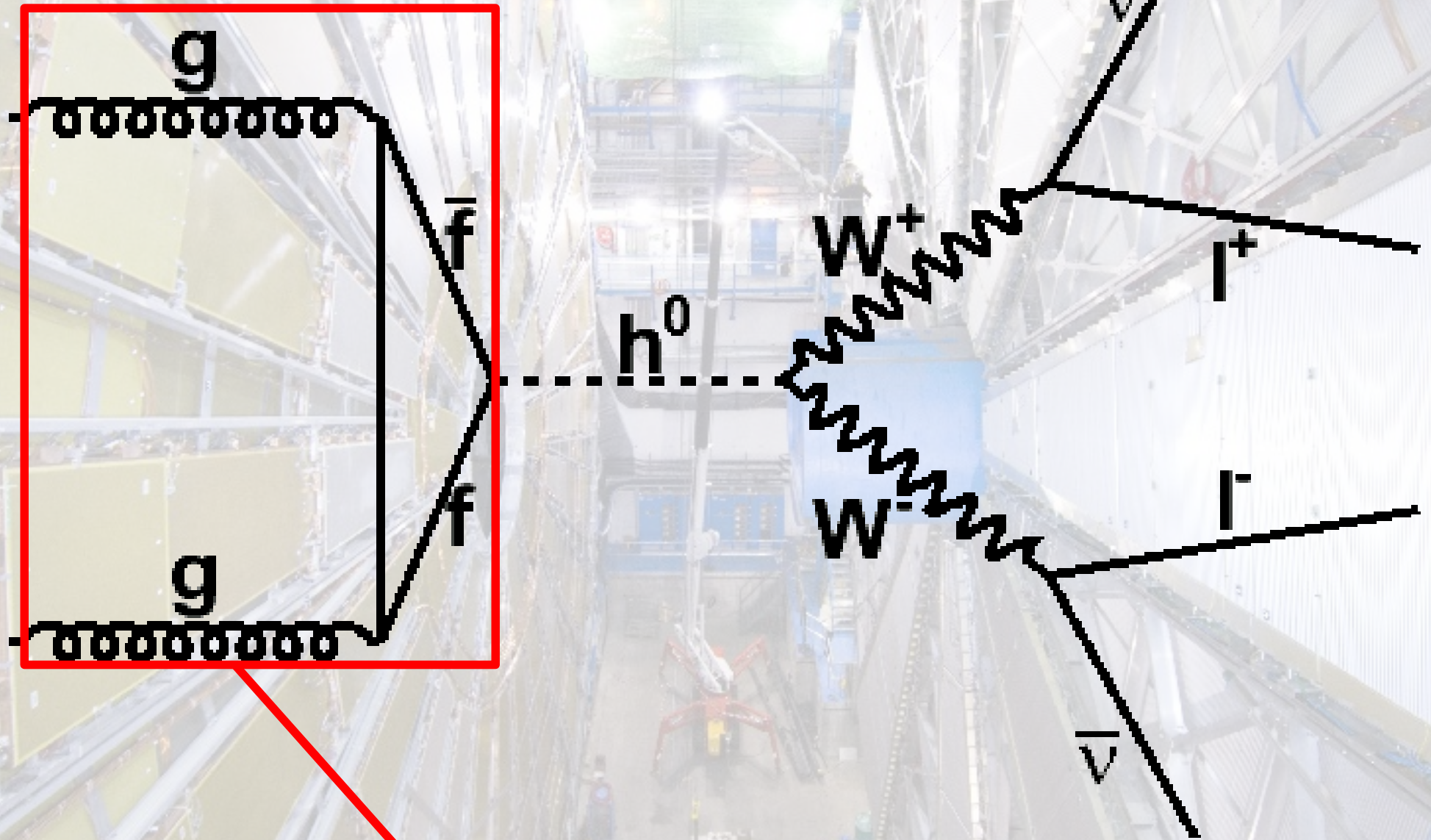
$\bar{\nu}$



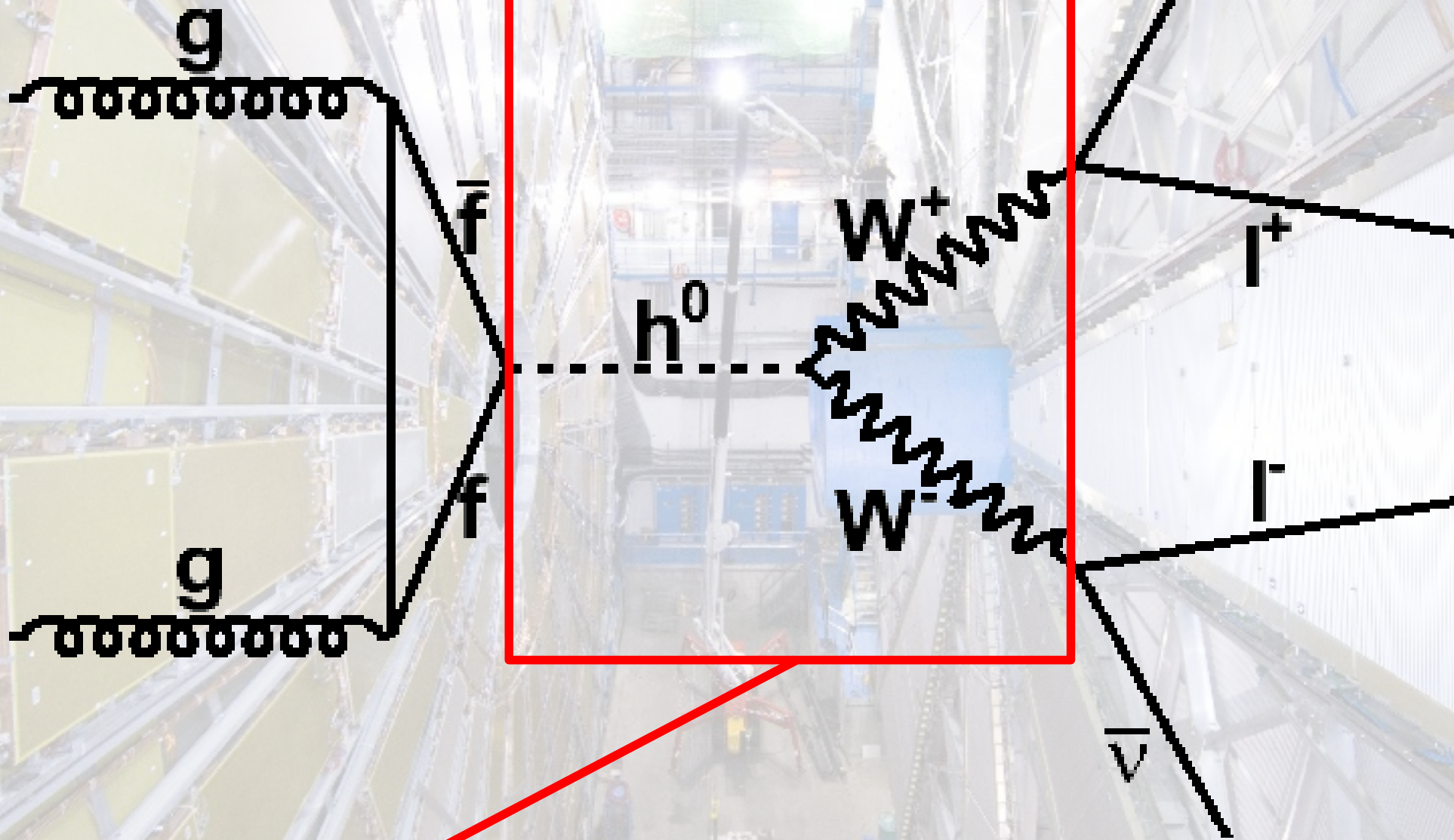
Peek-a-boo!



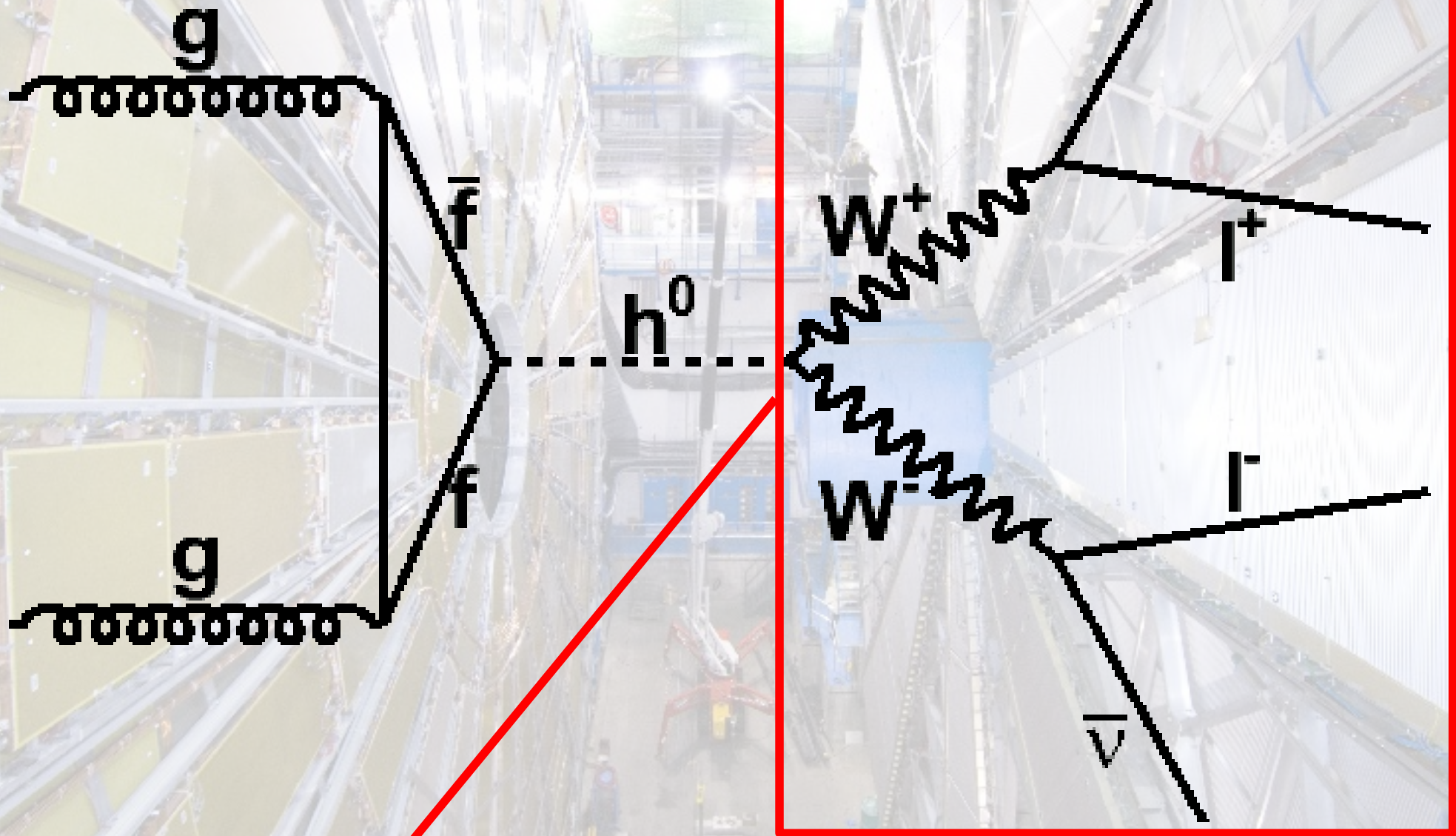
The LHC collides protons



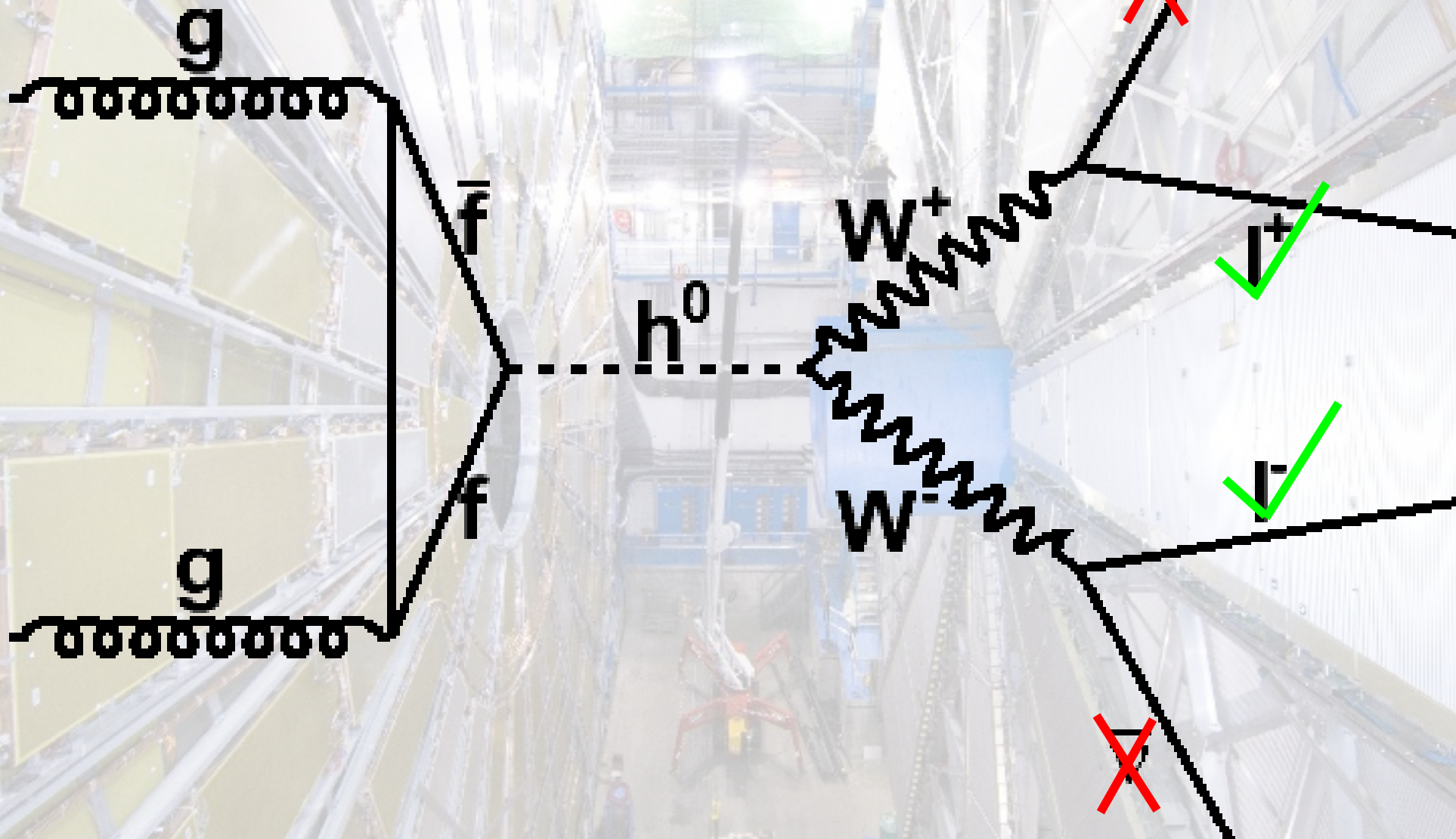
Gluons (hopefully) create a Higgs



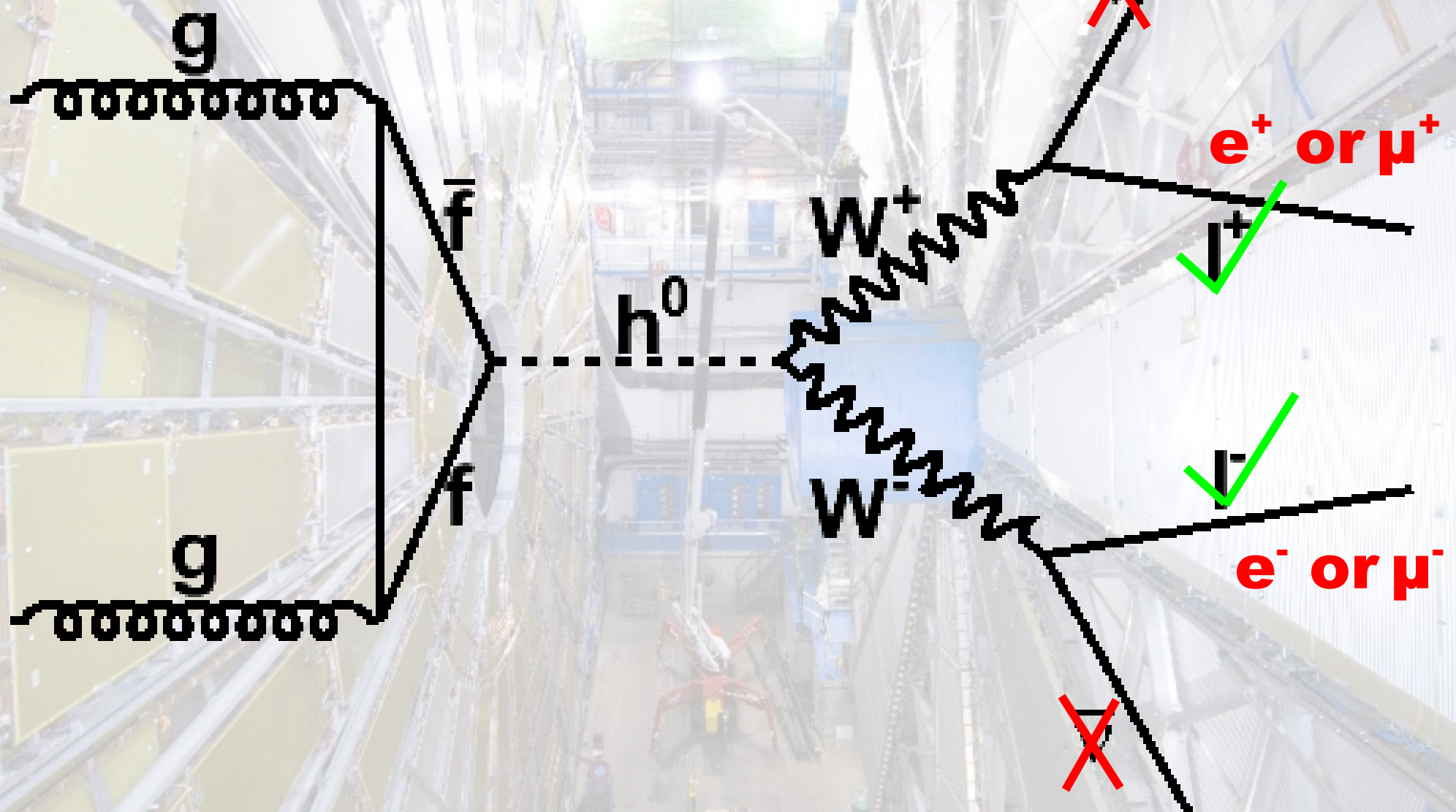
Higgs decays into two W bosons



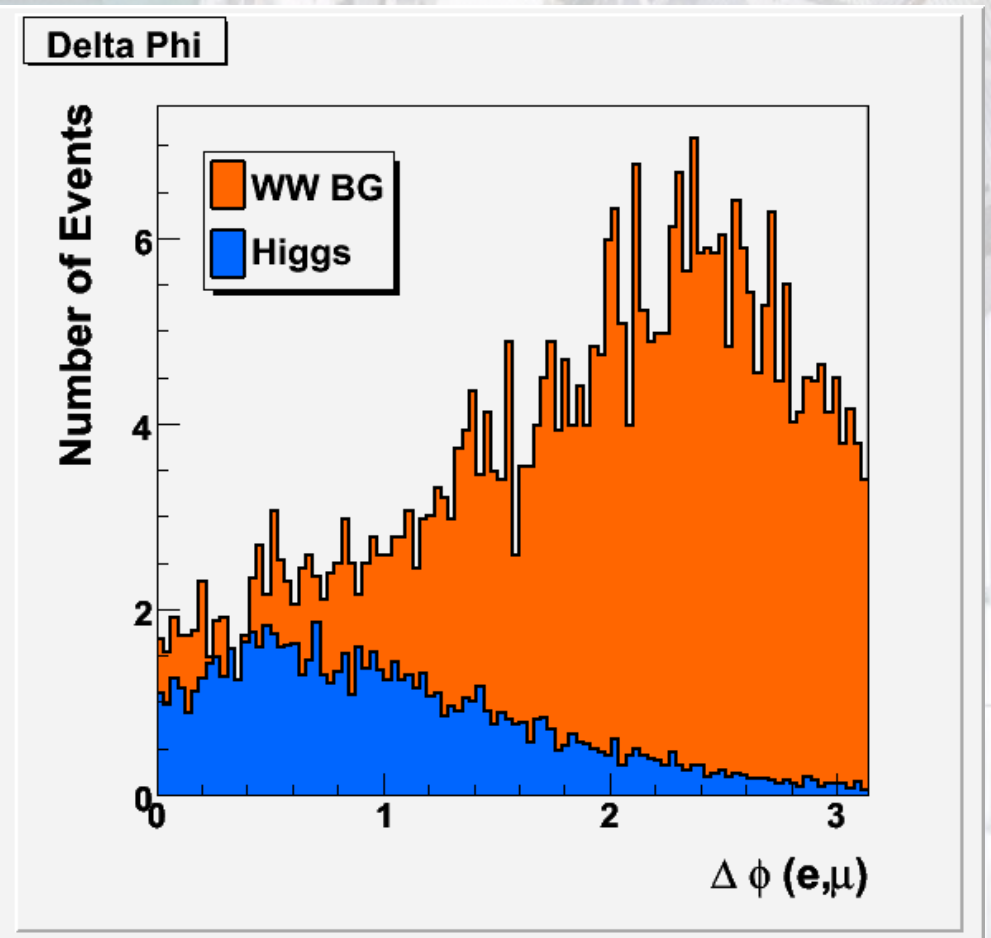
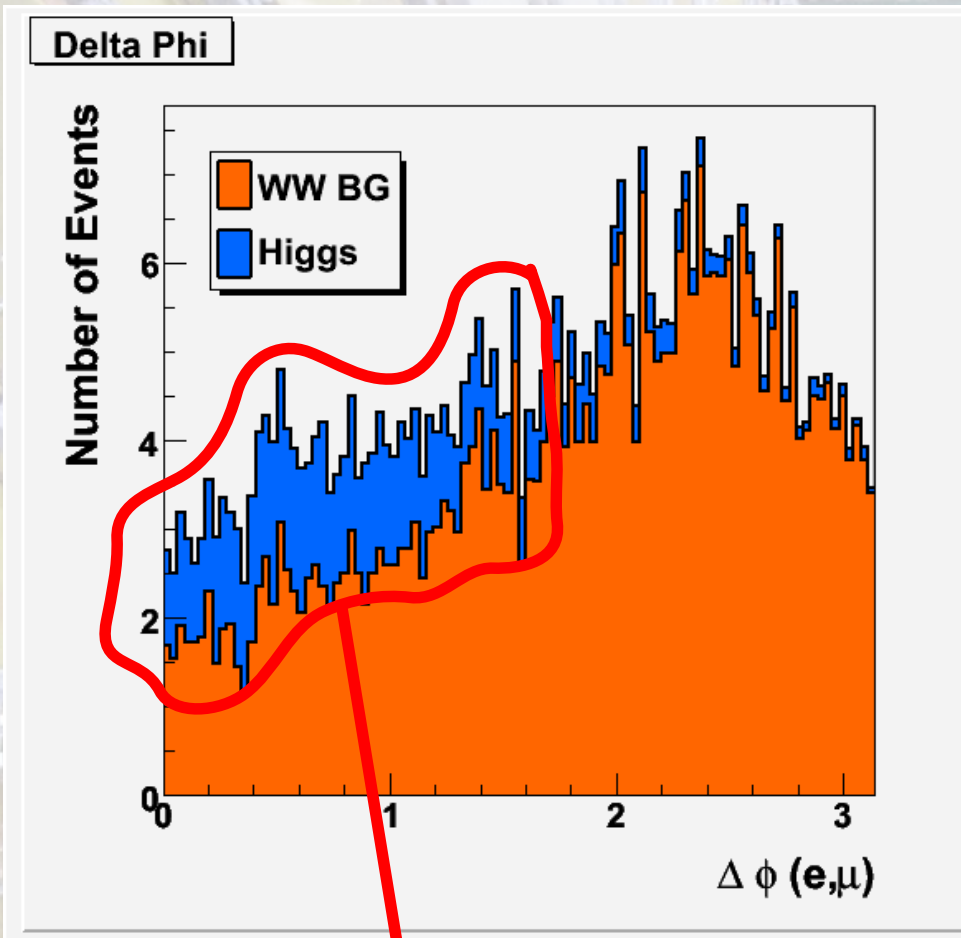
W bosons decay into leptons and neutrinos



ATLAS detects leptons and missing energy



$200 < M_H < 300$



Signal + Background = Higgs!

Il Finito!



**Lyon 1 - Concert
Orange Cinema**



Lyon 2 - Crepe Destruction