

# Actividades académicas en física de partículas Teilchendetektoren

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# 1. Construir una cámara de niebla



## 2. Juega Física de Partículas

**QUARKS**



**UP QUARK**  
A teeny little point inside the proton and neutron, it is friends forever with the down quark.

**DOWN QUARK**  
A tiny little point inside the proton and neutron, it is friends forever with the up quark.

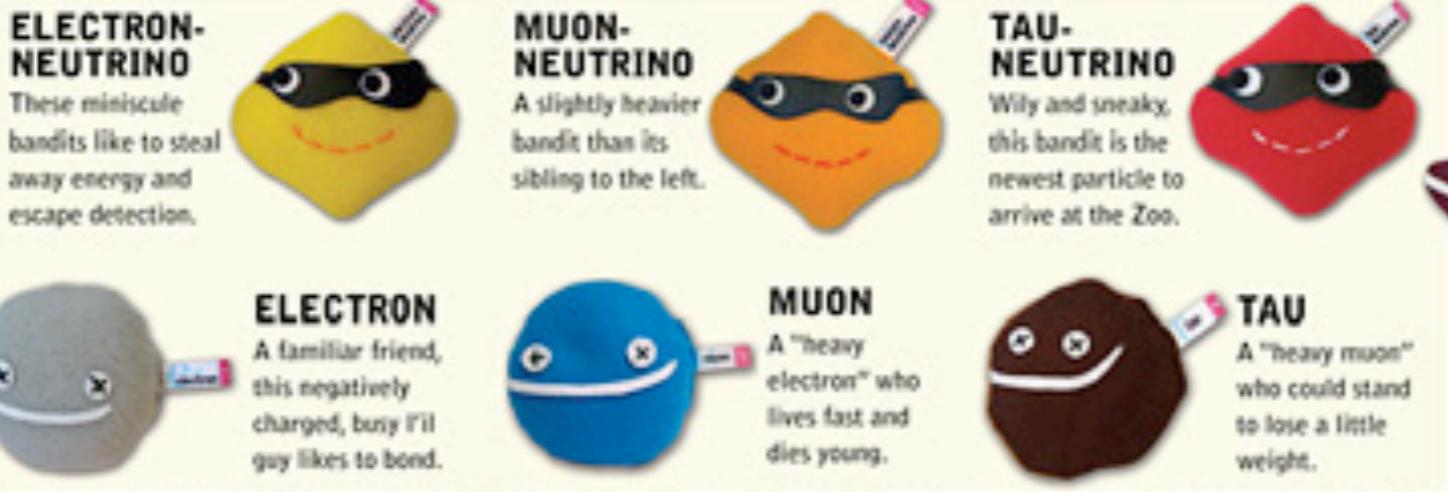
**CHARM QUARK**  
A second generation quark, it is charmed, indeed.

**STRANGE QUARK**  
Why is this second generation quark so strange?

**BOTTOM QUARK**  
This third generation quark is puttin' on the pounds.

**TOP QUARK**  
This heavyweight champion doesn't live long enough to make friends with anyone.

**LEPTONS**



**ELECTRON-NEUTRINO**  
These minuscule bandits like to steal away energy and escape detection.

**ELECTRON**  
A familiar friend, this negatively charged, busy f'l guy likes to bond.

**MUON-NEUTRINO**  
A slightly heavier bandit than its sibling to the left.

**MUON**  
A "heavy electron" who lives fast and dies young.

**TAU-NEUTRINO**  
Wily and sneaky, this bandit is the newest particle to arrive at the Zoo.

**TAU**  
A "heavy muon" who could stand to lose a little weight.

**THEORETICALS**



**HIGGS BOSON**  
It's the one everyone wants to meet, but for now it's playing hard to get. You'd be smiling too if everyone was looking to interview you.

**TACHYON**  
Can this devious and clever particle really travel faster than light?

**DARK MATTER**  
The mysterious missing mass. Difficult to see because it's so dark.

**FORCE CARRIERS**



**PHOTON**  
The massless wavelike we know and love.

**GLUON**  
The "glue" of the strong nuclear force.

**W BOSON**  
**Z BOSON**  
As the carrier particles of the weak nuclear force, they're downright obese.

**NUCLEONS**

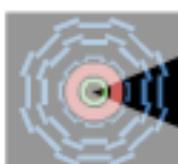


**PROTON**  
We would not be here without her positivity.

**NEUTRON**  
He insists on remaining neutral.

# ATLAS

animation

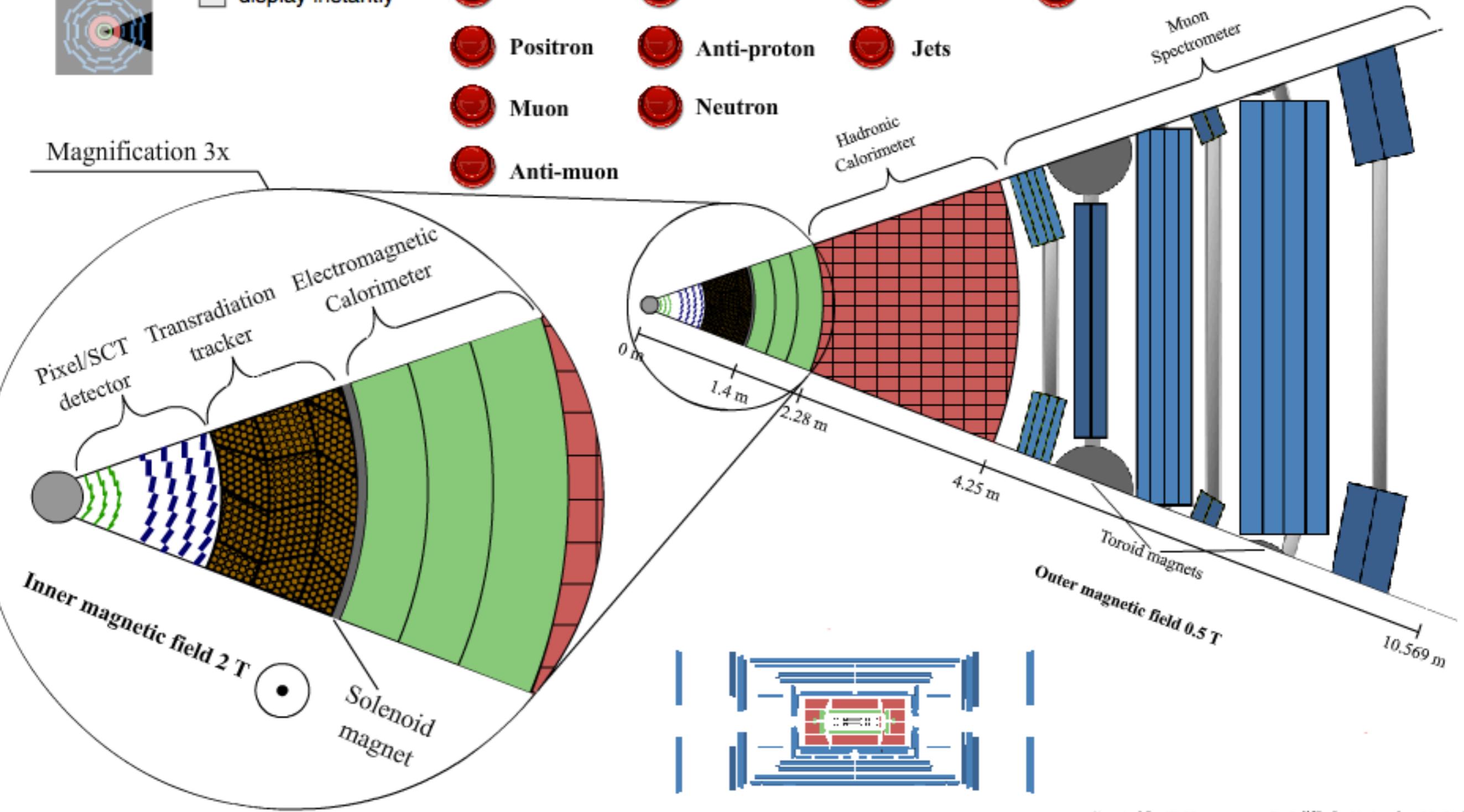


display instantly

- Electron
- Positron
- Muon
- Anti-muon

- Proton
- Anti-proton
- Jets
- Neutron

- Neutrino
- Photon



## 4. Identificando los partículas con MediPix



# Muchas gracias

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