Muon Detector

Purpose:

- Detect $J/\psi \to \mu^+\mu^-$ (SLAC had a good experience)
- Other ?

First draft for MAD (not yet optimized):

- LG calorimeter: the 1-st filter
- 2× (50 cm Fe + Scintill. hodoscope) ⇒
  Pion suppression ≈ 100 (MC)
- Pion decay: ≈ 10%, kinematic cuts (SLAC ≈ 1%)

Things to be built:

- 2 hodoscopes: 40 counters $25 \times 75 \times 1\ cm^3$
- 2 iron blocks $1.5 \times 2.5 \times 0.5\ m^3 \approx$ 30 t!

Can it be also built for HRS?

MAD: Muon detector

These results were obtained with 2 SLAC spectrometers detecting $J/\psi \rightarrow \mu^+\mu^-$ and $J/\psi \rightarrow e^+e^-$.