

## EUDET goal for ECAL

Build and set in beam a significant portion  
of an actual ECAL module

mechanical structure about  $\frac{1}{2}$  module

full length ~ 150 cm

full thickness 30 layers

half width 3 alveoli, enough for structural studies

to be made of W wrapped in C fibers

except if we decide to go for Pb

study in 2006

production 2007-2008

testing in beam 2009

estimated price 235 kE

Sensitive part

equip a full slab: 12x4 4 » wafers

with Si wafers and chips pad size?

1x1 or .5x.5 or .3x.3

a full tower : 4x30 wafers

or better more with more money, other contributors  
about 50–60 kE

chips with digital part integrated (and pulsing)  
related to pad size.

money see Christophe

Very important pieces to be studied:

Heat production and evacuation

Pad size

Material W/Pb

Interface to HCAL

Tests in beam,  
thorough evaluation of Geant4 hadronic part  
Post-doc for 2.5 years

Summary for money

a bit tight but really possible

some possibilities to spare on the slabs structure

EUDET LLR 79 kE + part overhead ~ 100

150 kE from IN2P3 = 250 compared to 295

Time scale adequate.