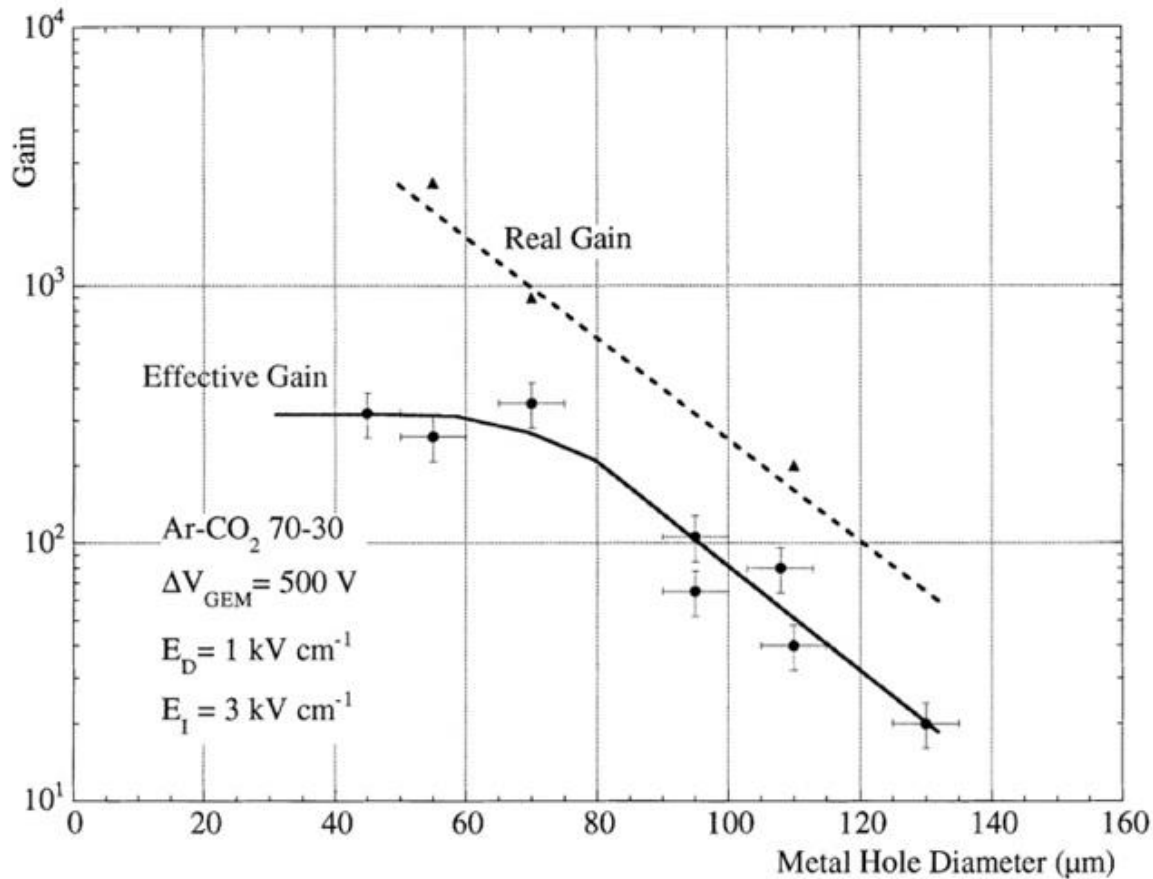


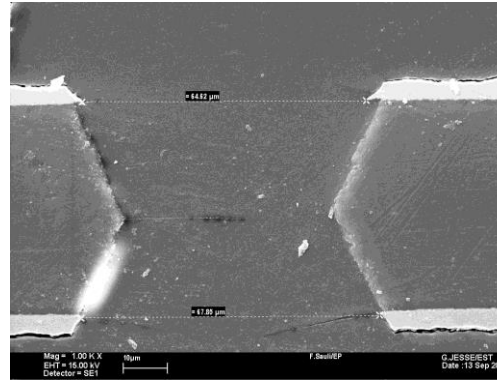
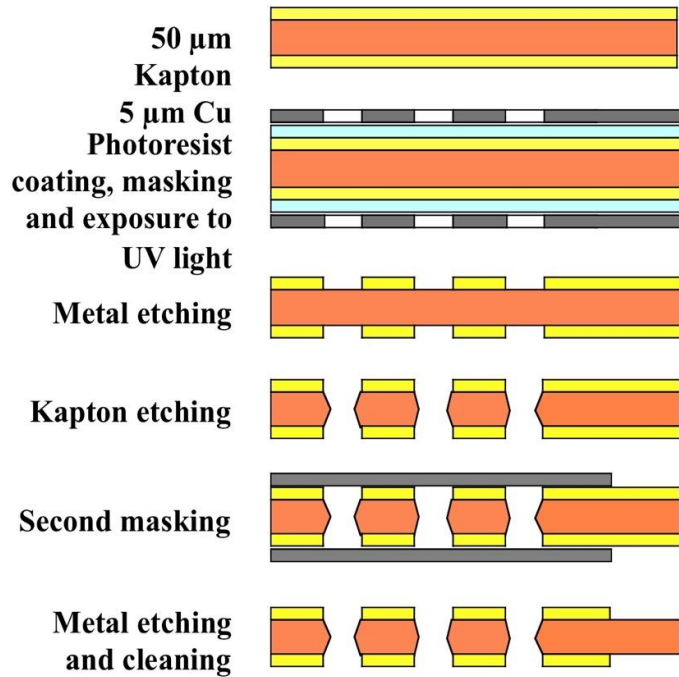
# GEM: GAIN DEPENDENCE FROM HOLE DIAMETER

## 50 $\mu\text{m}$ Cu-Clad Kapton (APICAL)

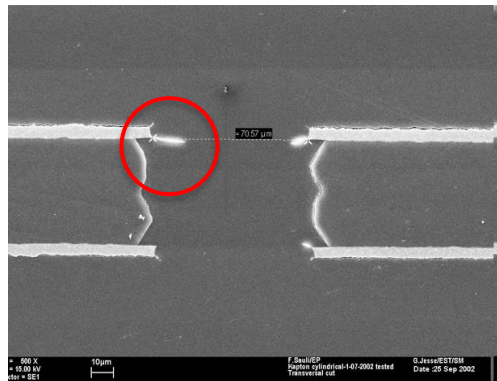


CHARGING-UP OF  
INSULATOR

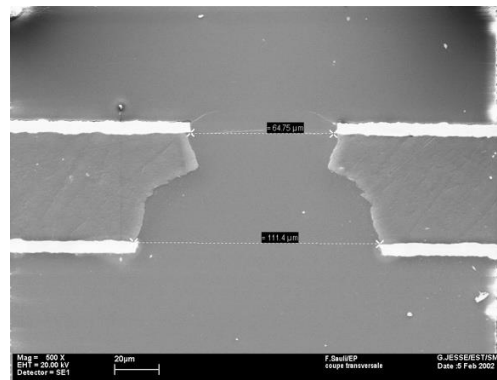
# GEM MANUFACTURING: DOUBLE MASK



STANDARD  
Double-Conical  
Hourglass



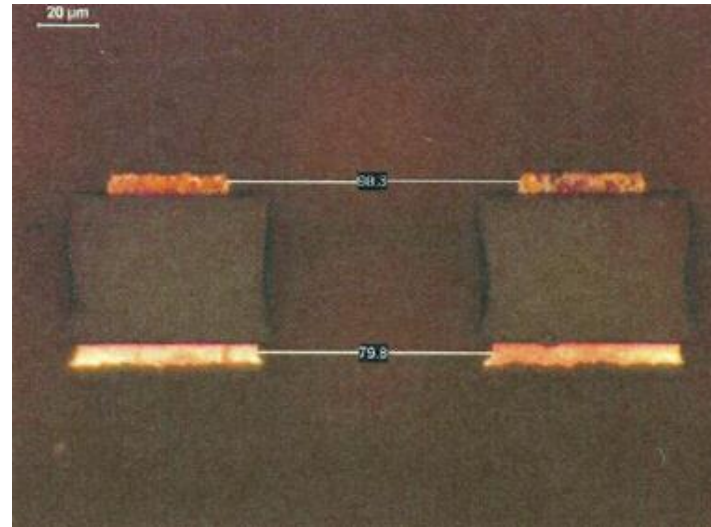
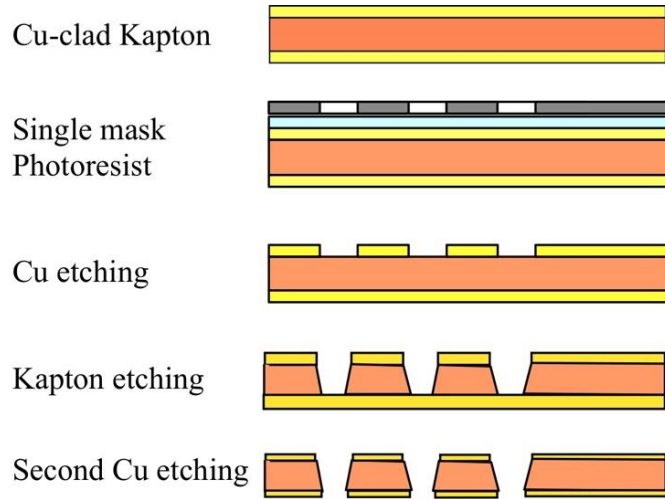
CYLINDRICAL



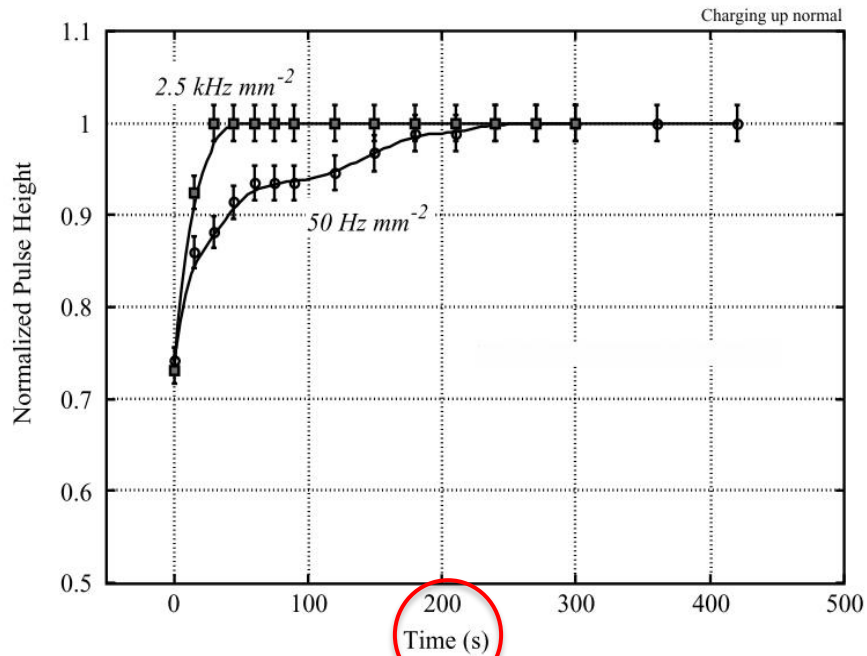
CONICAL

# GEM MANUFACTURING: SINGLE MASK

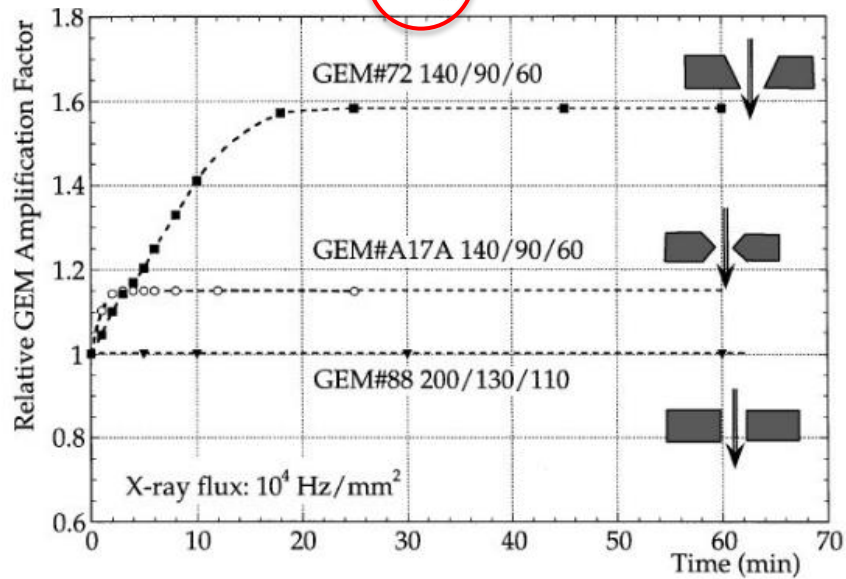
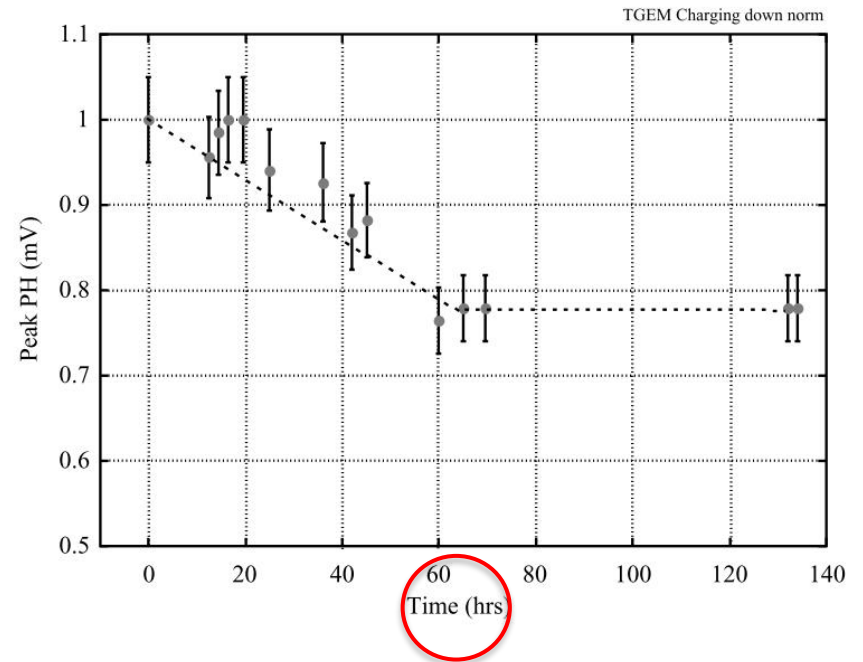
## Large Size Detectors



# CHARGING-UP: GAIN INCREASE AT POWERING

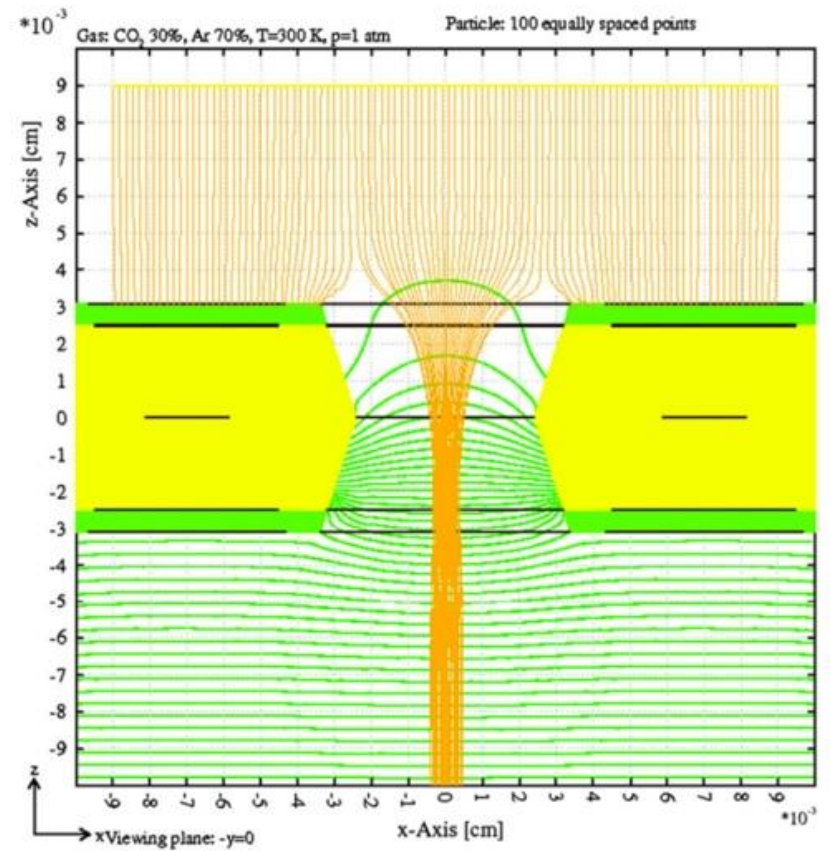
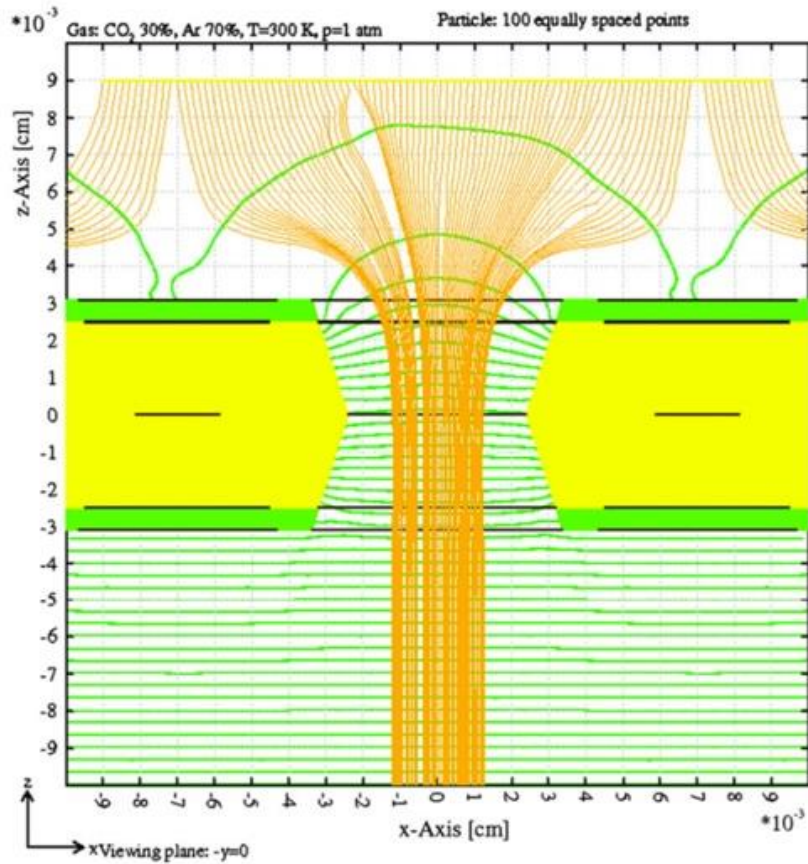


# "DISCHARGING"; SOURCE REMOVED



J. Benlloch et al, Nucl. Instr. Meth. A419(1998)410  
C. Altunbas et al, Nucl. Instr. Meth. A490(2002)177

# CHARING UP MODEL CALCULATION



M. Alfonsi et al, Nucl. Instr. Meth. A261(2012)6

# THICK GEM: RIM OR NOT RIM

