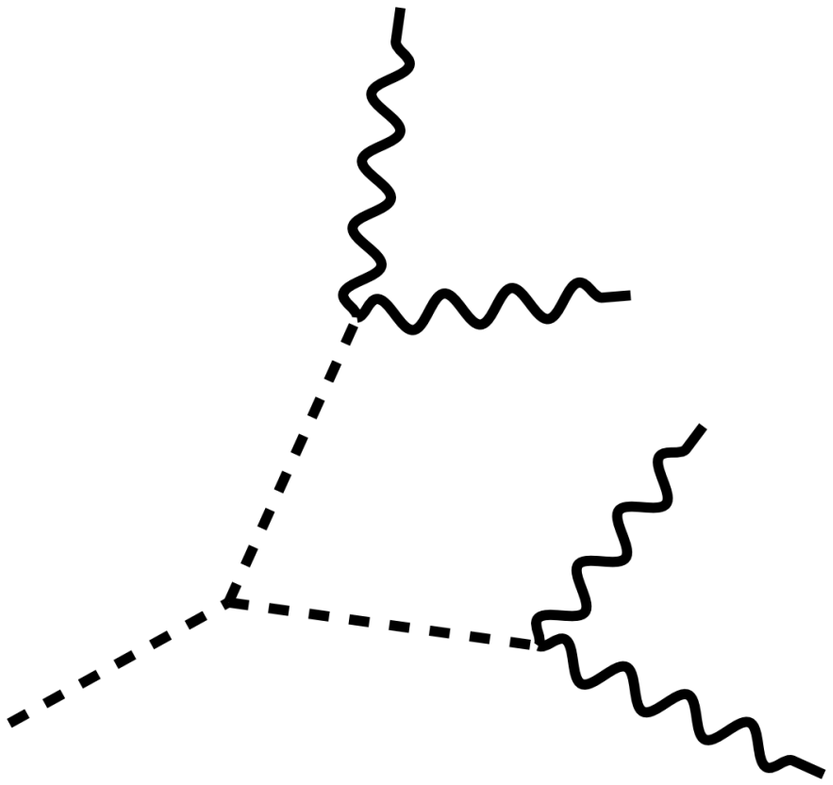
h(125)→aa→γγγγ



Higgs to 4 Gamma Update

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Toyoko Orimoto[1]
Andrea Massironi[2]

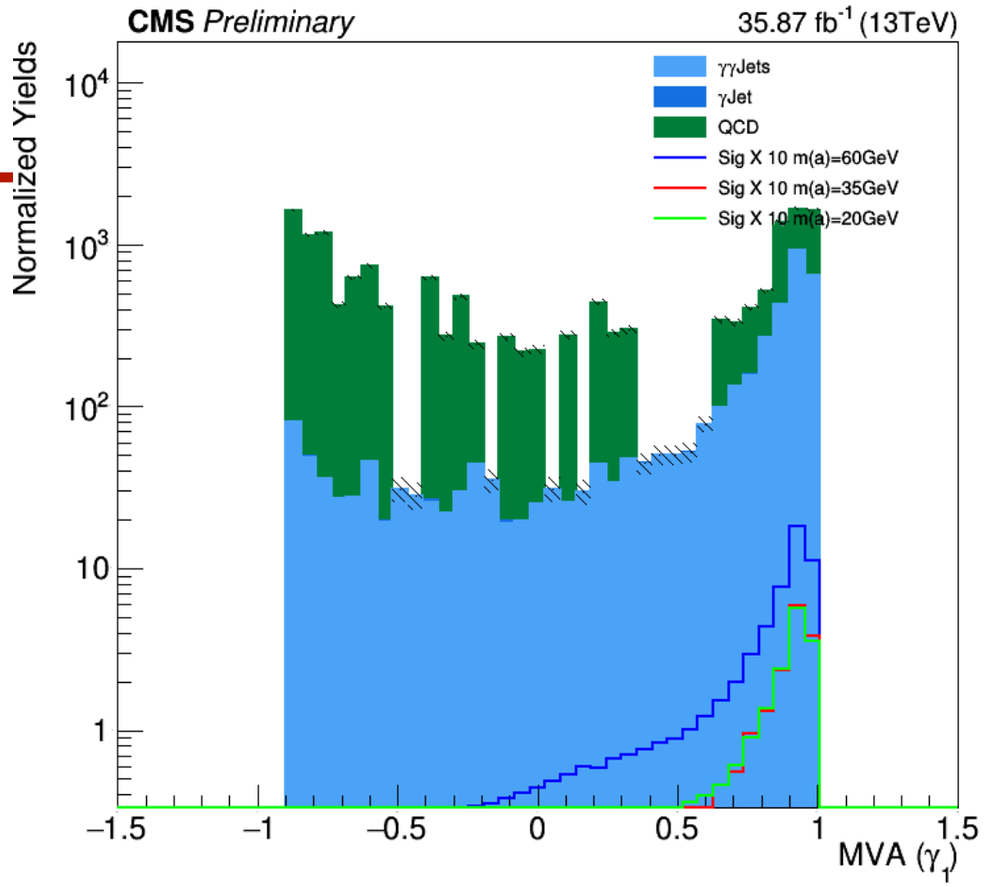
[1]Northeastern University

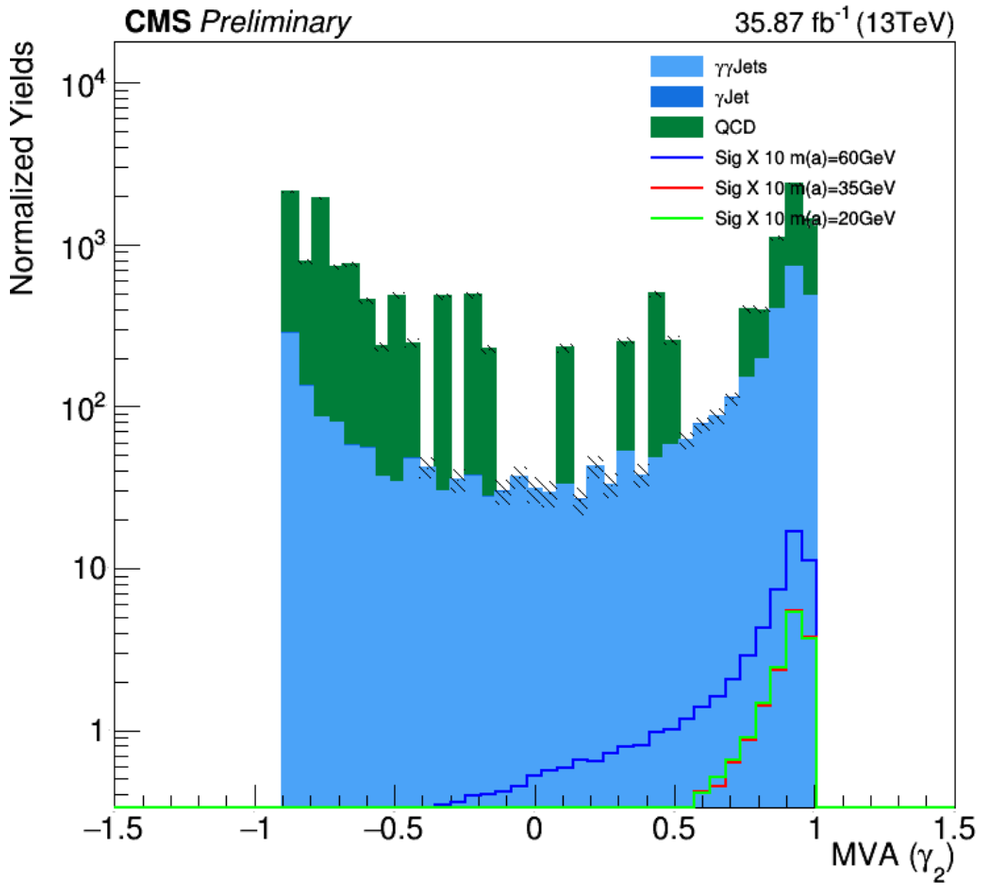
[2]INFN Milano-Bicocca

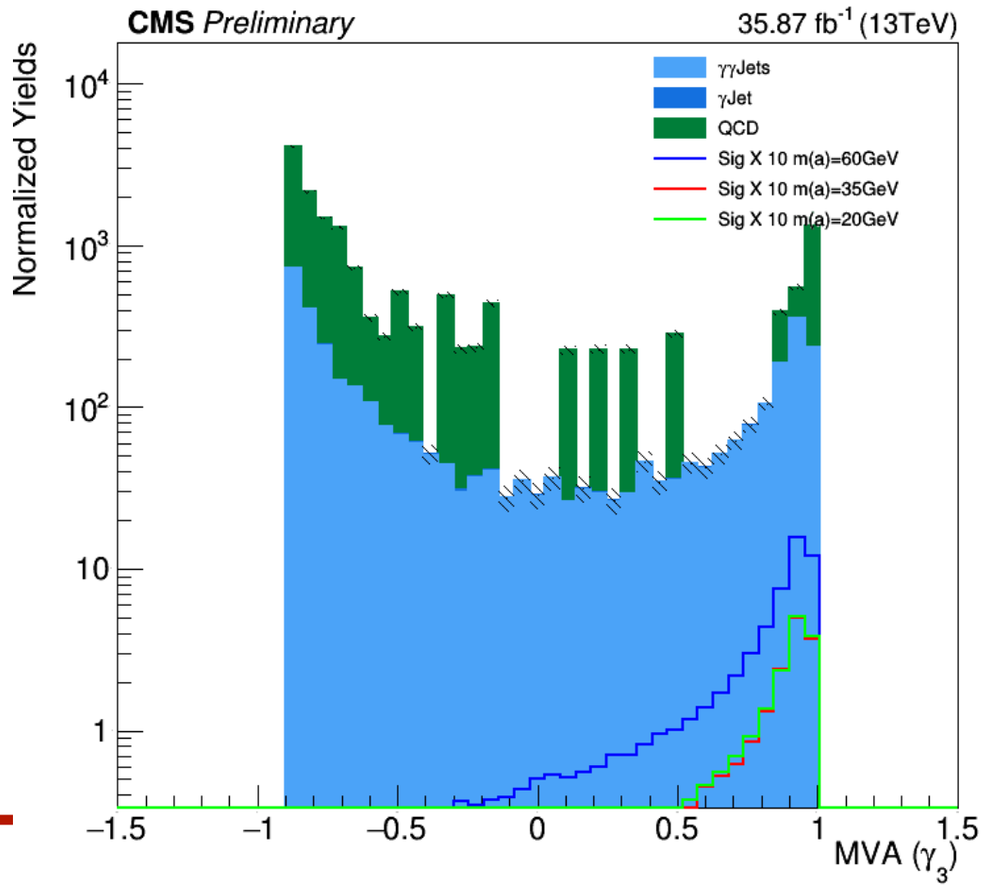
H4G chat
06 March 2018

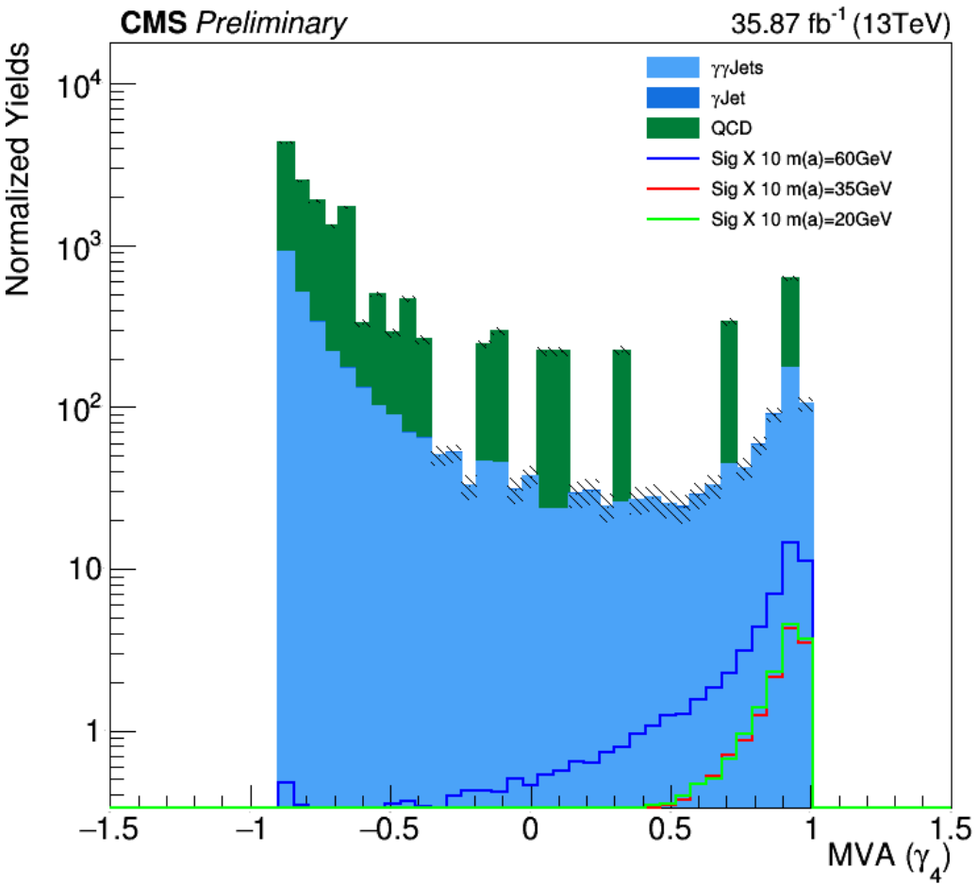
γJets20toInf and γJets40toInf samples are missing here

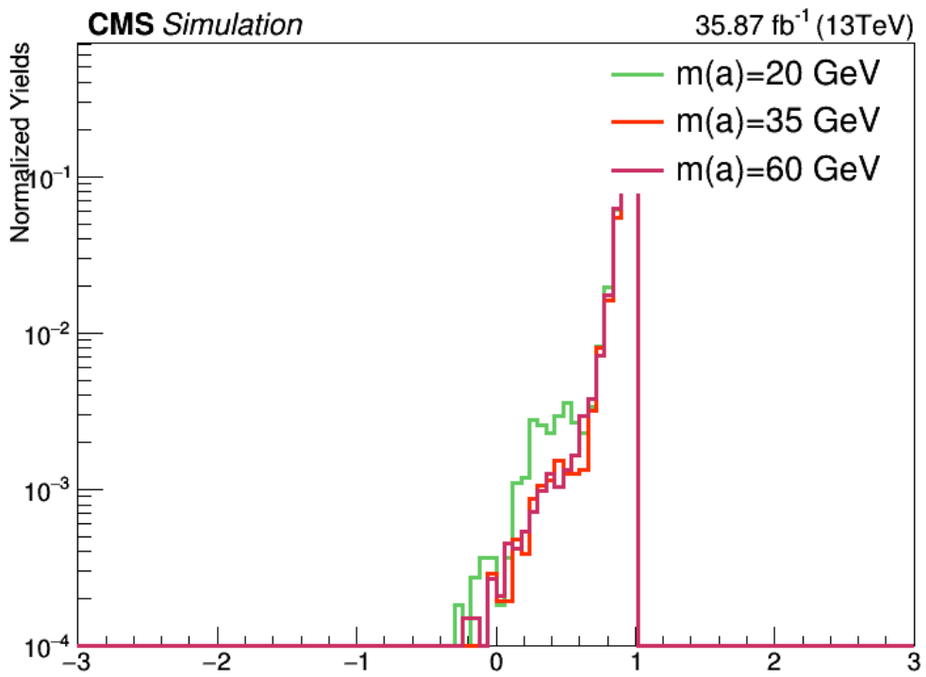
(Problem with running the skimmer code — memory issue)

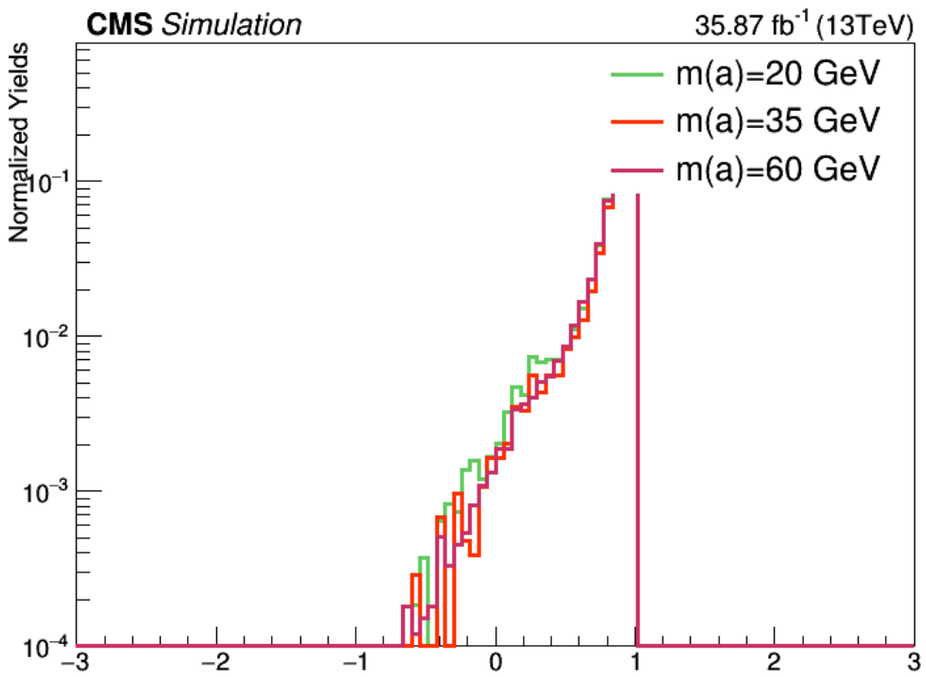


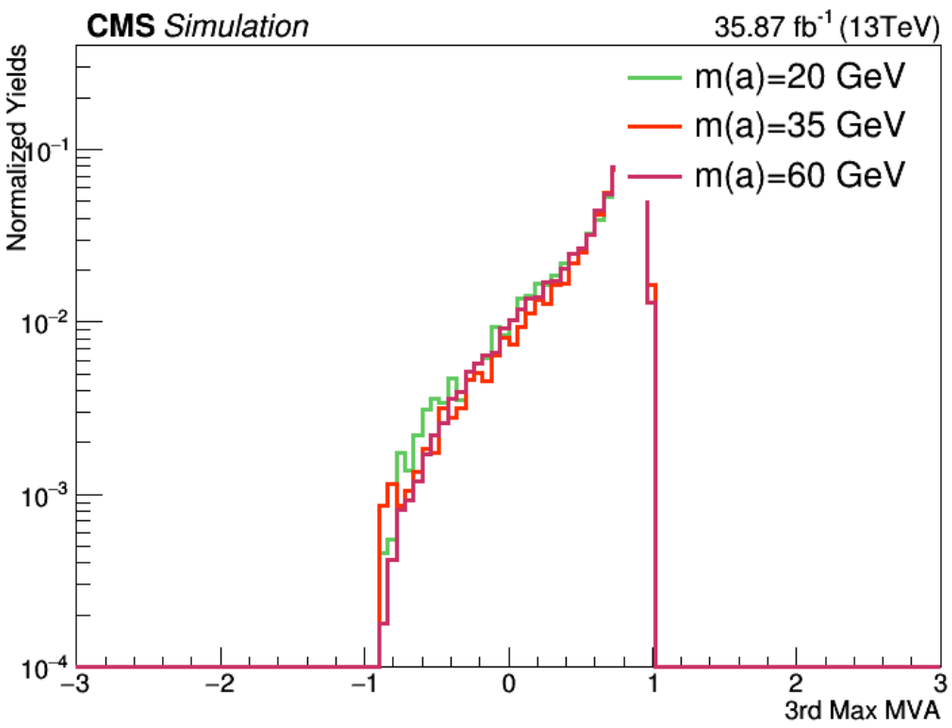


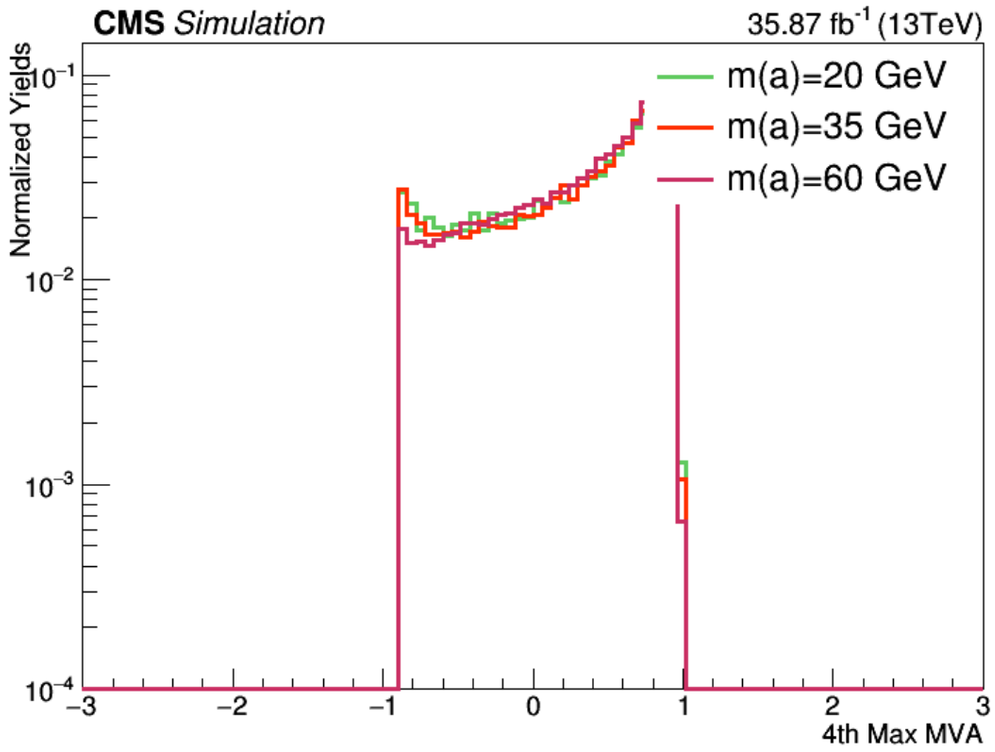





CMS Simulation
35.87 fb-1 (13TeV)
m(a)=20 GeV
m(a)=35 GeV
m(a)=60 GeV
Normalized Yields
Max MVA


CMS Simulation
35.87 fb-1 (13TeV)
m(a)=20 GeV
m(a)=35 GeV
m(a)=60 GeV
Normalized Yields
2nd Max MVA


CMS Simulation
35.87 fb-1 (13TeV)
m(a)=20 GeV
m(a)=35 GeV
m(a)=60 GeV
Normalized Yields
3rd Max MVA


CMS Simulation
35.87 fb-1 (13TeV)
m(a)=20 GeV
m(a)=35 GeV
m(a)=60 GeV
Normalized Yields
4th Max MVA

- Inputs to the photon MVA (from Hgg AN) :

8.0.6 Photon Id MVA input variables

The following variables are used as input to the BDT and described in detail in Section 4:

$\sigma_{i\eta i\eta}$, $cov_{i\eta i\Phi}$, E_{2x2}/E_{5x5}, R_9, σ_η, σ_ϕ, Preshower σ_{RR}, PF Photon ISO, PF Charged ISO (worst vertex), PF Charged ISO (selected vertex), ρ, supercluster η, and supercluster E_{RAW}.