

$h \rightarrow \tau^+ \tau^-$ BR Study Status

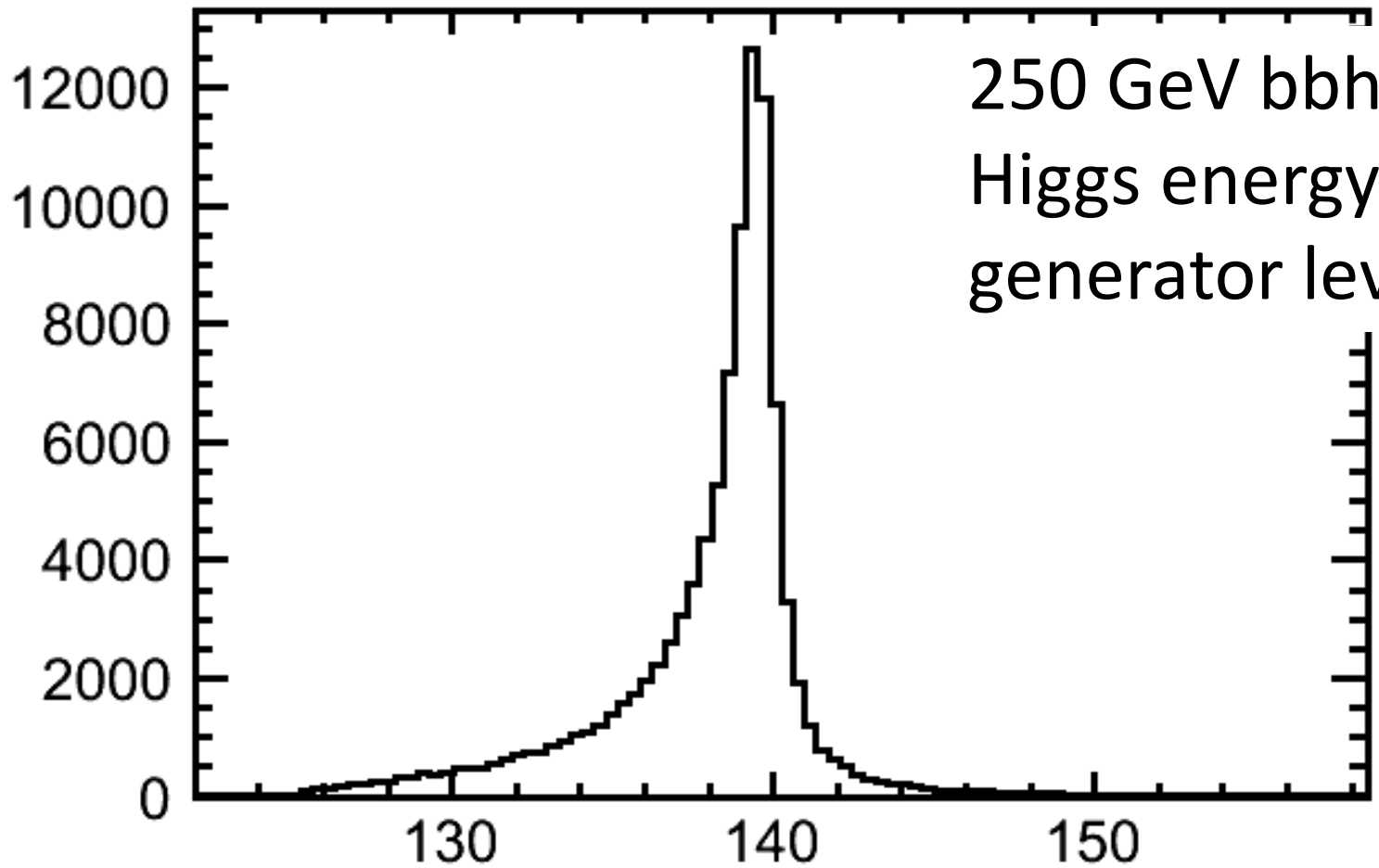
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Status

- I talked at JPS meeting @ Saga
- Check the new sample for ISR/BS
- Try to analyze with new sample

ISR/BS check of new sample

HiggsMCEnergy




250 GeV bbh
Higgs energy at
generator level

HiggsMCEnergy

Current results

250 GeV 250 fb ⁻¹	<i>qqh</i>	<i>vvh</i>	<i>e⁺e⁻h</i>	<i>μ⁺μ⁻h</i>
$\frac{\Delta(\sigma \times \text{BR})}{(\sigma \times \text{BR})}$	3.7%	46.0%	16.1%	14.7%

preliminary
TMVA result
w/ new MC



cut-based only w/ TDR MC
extrapolation results from $M_h = 120$ GeV

w/ TDR MC

500 GeV 500 fb ⁻¹	<i>qqh</i>	<i>vvh</i>	<i>e⁺e⁻h</i>	<i>μ⁺μ⁻h</i>
$\frac{\Delta(\sigma \times \text{BR})}{(\sigma \times \text{BR})}$	4.7%	6.8%	31.2%	17.6%

Plans

- Analysis with new samples, and update all numbers for all modes
- Start at 250 GeV... <--- now working on...