

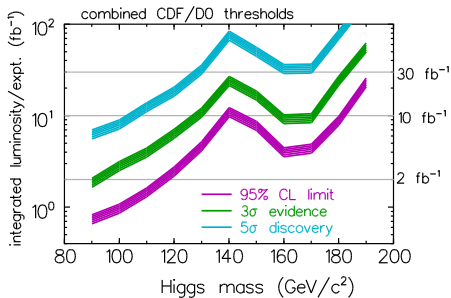
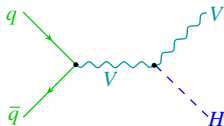
Higgs Strahlung – Theory

Robert Harlander
for the WH/ZH working group

Uni Wuppertal

Freiburg, April 12-13, 2010

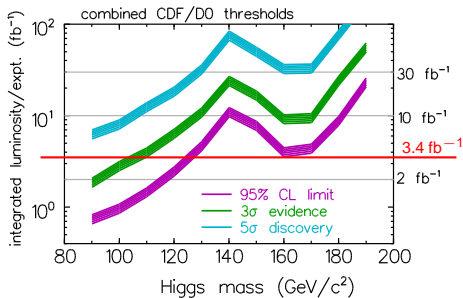
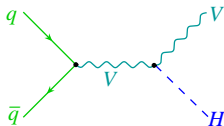
Higgs Strahlung



[Tev Higgs WG '00]

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 - main search mode for Tevatron

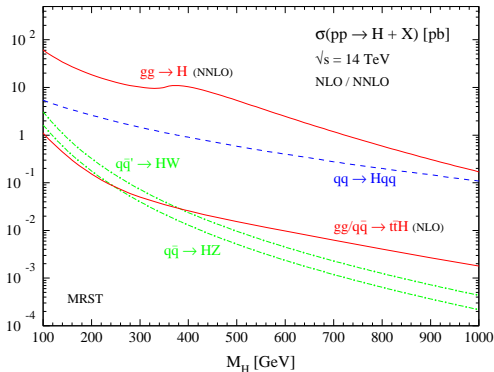
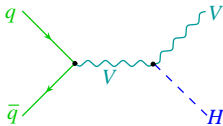
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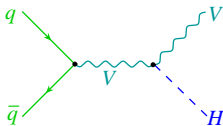
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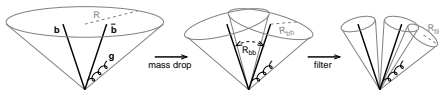


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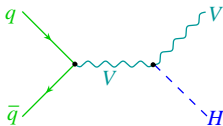
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[Butterworth *et al.* 08]

promising for $M_H \approx 120$ GeV



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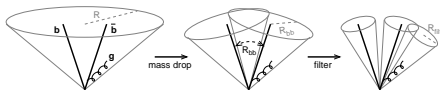
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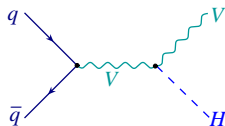
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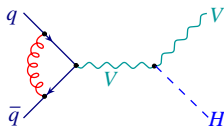
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→ needs kinematical distributions



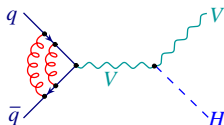


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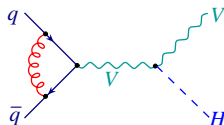
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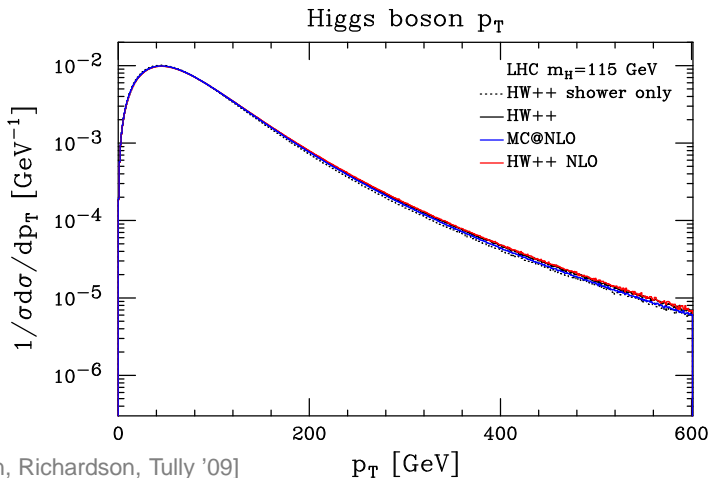
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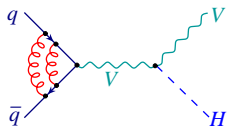
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known to NNLO [Hamberg, Matsuura, v. Neerven '91]
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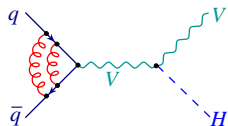
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- NLO [Han, Willenbrock '90]
available as numerical code `v2HV` [Spira]



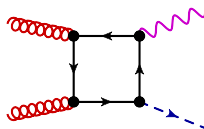


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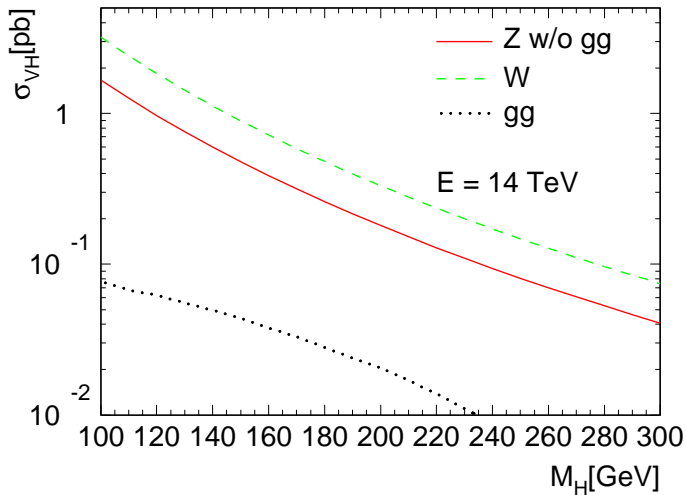


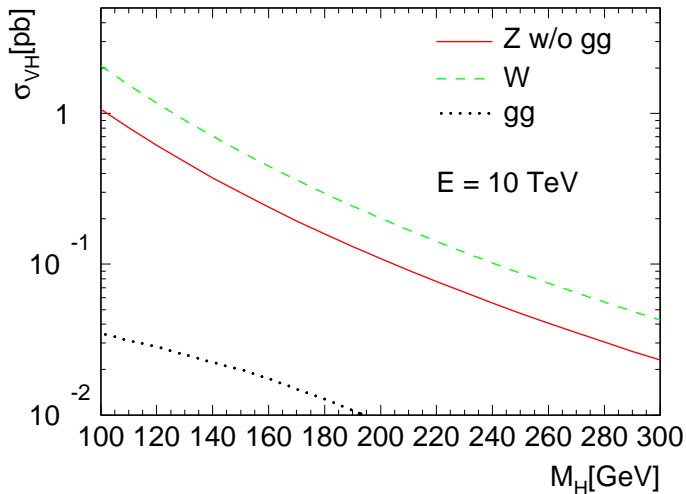
HZ :

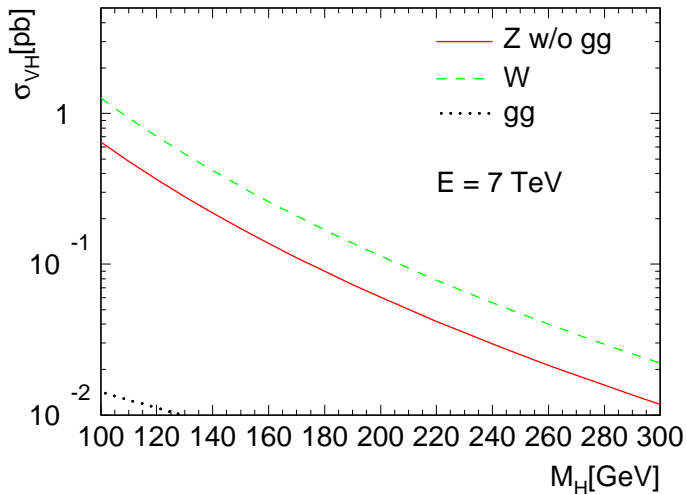


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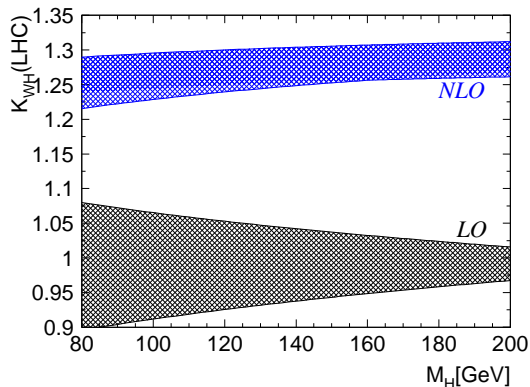
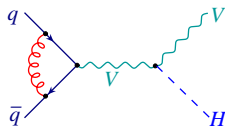
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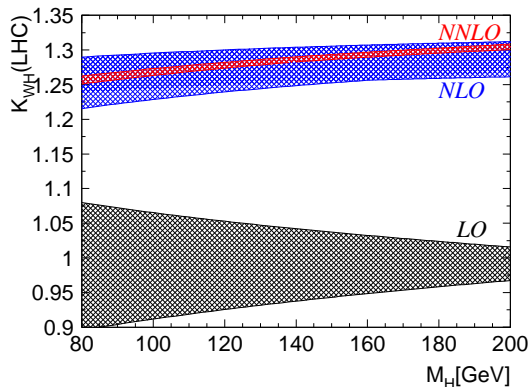
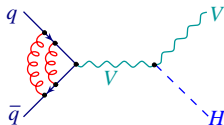
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[Han, Willenbrock '90]

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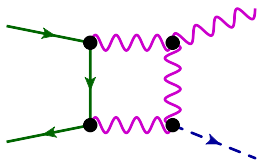


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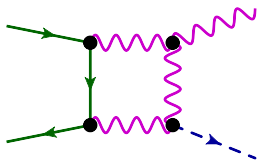
Electro-weak corrections



[Ciccolini, Dittmaier, Krämer '03]

- how to combine EW and QCD?

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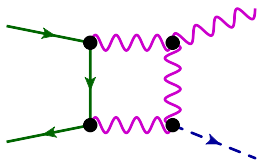


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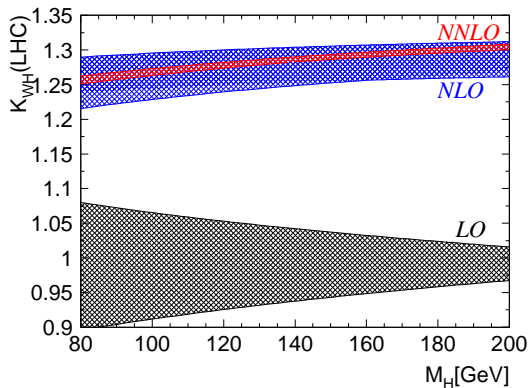
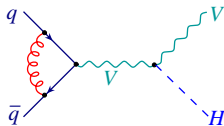
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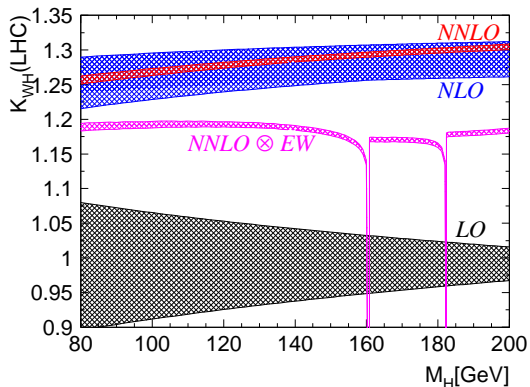
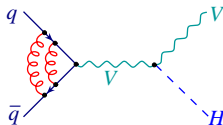
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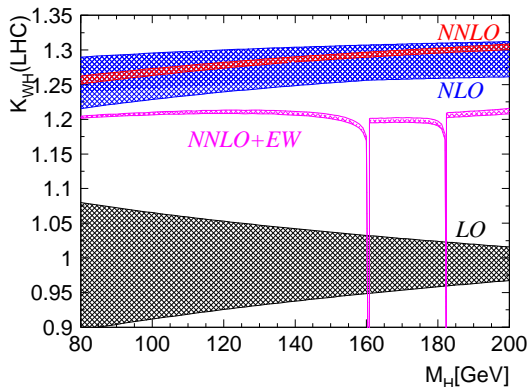
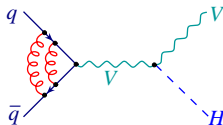


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