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VH Leptonic Analysis in the H to WW decay mode with full Run-2 Data[1] SARAH FREED, Rice Univ, CMS COLLABORATION — Presented are the results of a study of the production of a Higgs boson in association with a vector boson, in the H→ WW decay mode, using full Run 2 data collected at the LHC by CMS in pp collisions at $\sqrt{s} = 13$ TeV. Included in the results are two new VH, H→WW channels that were not previously included, the WHSS 2ℓ (WH same sign, 2-lepton) and ZH3ℓ channels. The recurring channels, ZH4ℓ and WH3ℓ, use updated analysis methods and feature improved results from the previously published H→WW analysis. While all VH leptonic channels will be discussed, special emphasis will be given to the WH SS 2-lepton channel in the scope of the full analysis. Combination and STXS measurements were also performed for the VH leptonic analysis and will be discussed.

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