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## Precision Higgs boson mass measurement using the $H \rightarrow ZZ^* \rightarrow 4l$ decay mode

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$H \rightarrow ZZ^* \rightarrow 4l$  decays give rise to a narrow four-lepton mass peak and provide means for precision Higgs boson mass measurements. The accuracy of the measurement is enhanced by using per-event four-lepton mass uncertainties, the mostly on-shell Z-boson mass line shape, and ME-based kinematic discriminant used to separate signal and background.

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