

Search for Lepton-flavor-violating Higgs decays at CMS

Tuesday

May 19

4 P.M.

Rm 415 NSH

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The properties of the Higgs boson discovered by CMS and Atlas experiments identify it as the boson foreseen by the Standard Model. Nevertheless, alternative models are still possible. Some of these models allow flavour violating decays of the Higgs boson. Indirect constraints strongly limit the decay $H \rightarrow e\mu$, but allow branching ratios of $O(10\%)$ for $H \rightarrow \mu\tau$ and $H \rightarrow e\tau$. The first direct searches for these decays have been performed by CMS. After the $H \rightarrow \mu\tau$ search presented last year, the newest CMS results focus on the $H \rightarrow e\tau$ and $H \rightarrow e\mu$ decays.