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## **Search for new resonances involving Higgs, W or Z boson at CMS (15' + 5')**

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Beyond the standard model theories like composite Higgs models predict resonances with large branching fractions in a Higgs boson and a vector boson with negligible branching fractions to light fermions. We present an overview of searches for new physics containing a Higgs boson and a W or Z boson in the final state, using proton-proton collision data collected with the CMS detector at the CERN LHC. For high-mass resonances decaying to intermediate bosons, the large boost for hadronic decays gives rise to one single “merged” jet, which can be identified through a study of its substructure consistent with the presence of two quarks, enhancing the sensitivity due to the large branching ratios for hadronic decays. B-quark identification algorithms are used in addition to identify the hadronic H decays.

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