

MVA techniques for Higgs CP in tau decays

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Purpose: ignite the discussion

Slides contain NOT a full-fledged elaborated overview of all options!

- Methods worth considering:
 - Do we want to use ML for event categorisation, as opposed to classify CP state of decaying boson?
 - Interplay with SM analysis?
 - Perhaps use one instead of two signal categories, or just add in data cards?
 - Interplay with decay modes MVA?
 - Apply MVA after categorisation, or train MVA dedicatedly per decay mode?
 - Polarisation vector method: MVA methods for reconstructing polarisation vector?
 - Polarisation vector in 1-prong X 1-prong decays?
 - In boosted Higgs scenarios?
- Perhaps we can discriminate between methods:
 - Best (optimal discrimination)
 - Necessary (and fast)

Contact

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