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# HHFramework - A common framework for HH analyses in the ATLAS experiment

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In preparation for the Run 3 HH analyses in the ATLAS experiment, the DiHiggs group aims to harmonize data analysis techniques, object selection, and tools into a general HH framework. This framework is designed to simplify and streamline common steps in various analyses (e.g., ntuple production, statistical analysis) while addressing the specific needs of each individual analysis (e.g., object selection, background estimation). This harmonization will also be crucial for future combinations of the various channels. In the HH->bbγγ analysis, we contribute to and utilize the integration of advanced tools within the common framework to explore the Higgs boson self-coupling and, in doing so, extend our understanding of its potential.

## Summary

**Presenter:** MERIANOS, Spyridon (Aristotle University of Thessaloniki (GR))