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The use of Semi-Supervision in the search for heavy resonances with the $Z\gamma$ final state

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Unlike supervised learning which is known to assume a full knowledge of the underlying model, semi-supervised learning, weak supervision in particular allows with partial knowledge to extract new information from the data. The objective of this study is to set up the search for heavy resonances at the electroweak scale with topological requirements. These resonances could be produced with different production mechanisms. In this case we will be focusing on the searches for new resonances in the Zγ final state using weak supervised learning approach. This will then be compared to the performance of the full supervision approach.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

PhD

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