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# The last gasp of dark matter effective theories

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Effective theories are a great tool to present constraints on broad BSM assumptions in a rather model-independent fashion. However, effective theories have a limited range of validity which can, especially in collider searches, complicate an analysis. We argue that in order to achieve a consistent analysis more specific hypotheses about BSM physics are needed and can subsequently be tested. This does not imply that the generality of EFTs has to be abandoned in favour of complete or simplified models. I will present large classes of theories (including naturally light pseudo Goldstone bosons, Goldstini and composite dark matter) where a parametrisation in terms of effective operators is indeed appropriate. We can classify these theories by the symmetries of the underlying UV-theory. Finally, I will discuss the consequences for an experimental analysis.

## Summary

**Primary author:** BRUGGISSER, Sebastian (DESY Theory-Group)

**Presenter:** BRUGGISSER, Sebastian (DESY Theory-Group)

**Session Classification:** Dark Matter & colliders

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