LHC Dark Matter Working Group:
Next-generation spin-0 dark matter models

List of contributions

## Contents

- Tomohiro Abe, Inputs on the direct detection part of the white paper.
- Yoav Afik, Studies of heavy flavor signatures (kinematic distributions, flavor studies, rescaling).
- Andreas Albert, Design of the 2HDM+a parameter scans; Kinematic distributions and cross-sections for mono-Z(lep); Relic density study.
- Christopher R. Anelli, Design of 2HDM+a parameter scans, kinematic distributions for mono-Z(lep), 2HDM+a cross-sections and sensitivity estimates for mono-Z(lep).
- Nicole F. Bell, Work on direct detection constraints, relic density, 2HDM+scalar model.
- J. Katharina Behr, Help with coordination of ATLAS studies; re-interpretation of  $A/H - > t\bar{t}$  search.
- Liron Barak, Final reviewer of the white paper.
- Martin Bauer, Theory section.
- Antonio Boveia, Inputs as DMWG organizer for this effort.
- Oleg Brandt, Design of 2HDM+a parameter scans, supervision of L. Henkelmann.
- Giorgio Busoni, Work on direct detection constraints, relic density, 2HDM+scalar model.
- Linda M. Carpenter, Indirect Detection annihilation signatures of 2HDM.
- Yu-Heng Chen, Re-interpretation of  $A/H - > t\bar{t}$  search; modification of UFO to include signal-background interference.
- Caterina Doglioni, Editor (as DMWG organizer), organization of material, inputs on experimental part of the document.
- Alison Elliot, Kinematic distributions for mono-Z(lep).
- Motoko Fujiwara, Comments on the direct detection part of the white paper.
- Marie-Helene Genest, Final reviewer of the white paper.
- Raffaele Gerosa, Final reviewer of the white paper.
- Johanna Gramling, 4-top studies (cross-section, model implementation, interference with SM checks).

- Stefania Gori, Final reviewer of the white paper.
- Alexander Grohsjean, Final reviewer of the white paper.
- Giuliano Gustavino, Inputs on experimental monojet constraints.
- Kristian Hahn, Inputs as DMWG organizer for this effort.
- Ulrich Haisch, Main editor (as DMWG organizer), organization of material, inputs on both theory and experimental part of the document.
- Lars Henkelmann, Design of 2HDM+a parameter scans, kinematic distributions for mono-Higgs, 2HDM+a cross-sections and sensitivity estimates for mono-Higgs.
- Junji Hisano, Comments on the direct detection part of the white paper.
- Anders Huitfeldt, Sensitivity projections for the 2HDM+scalar model, simplified models to 2HDM+scalar model re-scaling studies.
- Valerio Ippolito, Inputs on experimental monojet constraints.
- Felix Kahlhoefer, Final reviewer of the white paper. Inputs on treatment of resonances, indirect detection, relic density.
- Greg Landsberg, Contributions to  $bb + E_T^{\text{miss}}$  part of the paper and Fig. 43.
- Steven Lowette, Inputs as DMWG organizer for this effort, review of the white paper.
- Fabio Maltoni, Review of document, addition of relevant references.
- Benedikt Maier, Design of 2HDM+a parameter scans, CMS studies on mono-Higgs.
- Margarete Muehlleitner, Final reviewer of the white paper. Wi
- Jose M. No, Stability study of the 2HDM+a, towards definition of benchmarks for mono-h and mono-Z analyses.
- **Priscilla Pani**, 4-top studies (cross-section, model implementation, interference with SM checks). Wt+MEt signature studies.
- Giacomo Polesello, Rescaling of DMSimp to 2HDM+a, heavy flavor signature studies.
- Darren D. Price, Final reviewer of the white paper.
- Tania Robens, Input on inert doublet model. Final reviewer of the white paper.
- Giulia Rovelli, Rescaling of DMSimp to 2HDM+a, heavy flavor signature studies.
- Yoram Rozen, Supervision of Yoav Afik.

- Isaac W. Sanderson, Work on direct detection constraints, relic density, 2HDM+scalar model.
- Rui Santos, Final reviewer of the white paper.
- Stanislava Sevova, CMS studies on heavy flavor signatures.
- David Sperka, Final reviewer of the white paper.
- Kevin Sung, Inputs on heavy flavor signatures.
- Tim M. P. Tait, Inputs as DMWG organizer for this effort.
- Koji Terashi, organized Mono-Z meetings between ATLAS and CMS, studies of Mono-V hadronic channel.
- Francesca C. Ungaro, Help with coordination of ATLAS heavy flavour signatures, MC simulations of the 2HDM+scalar model, validation of the results.
- Eleni Vryonidou, Review of document, addition of relevant references.
- Shin-Shan Yu, Design of 2HDM+a parameter scans, CMS studies on mono-Higgs.
- Sau Lan Wu, Supervision of Chen Zhou.
- Chen Zhou, Work within ATLAS on implementation and study of model.