

Dilepton non-resonant searches

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Note: Slides slightly updated wrt the ones presented in the meeting

Work description

- For mediators with large width, resonance analyses may not work
- Question: Can the existing non-resonant analyses work? What is their constraining power for DM simplified models with large mediator widths?
- Can study monojet/dijet/dilepton interplay for wide resonances

Existing analyses	sqrt(s) (TeV)	Description	Digitised data?
ATLAS-EXOT-2013-19	8	Dilepton non-resonant	Yes
CMS-EXO-14-015	8	Excited leptons	No*
CMS-PAS-EXO-16-009	13	Excited leptons	No
ATLAS-EXOT-2015-02	13	Dijet angular	No
CMS-EXO-15-009	13	Dijet angular	No

- * contains several tabulated results (no digitised plots)
- Currently in dilepton ATLAS 8 TeV analysis being implemented, because it has hep data
 - Will implement at least two analyses by end of the year

Thanks to C. Doglioni for pointing out the analyses