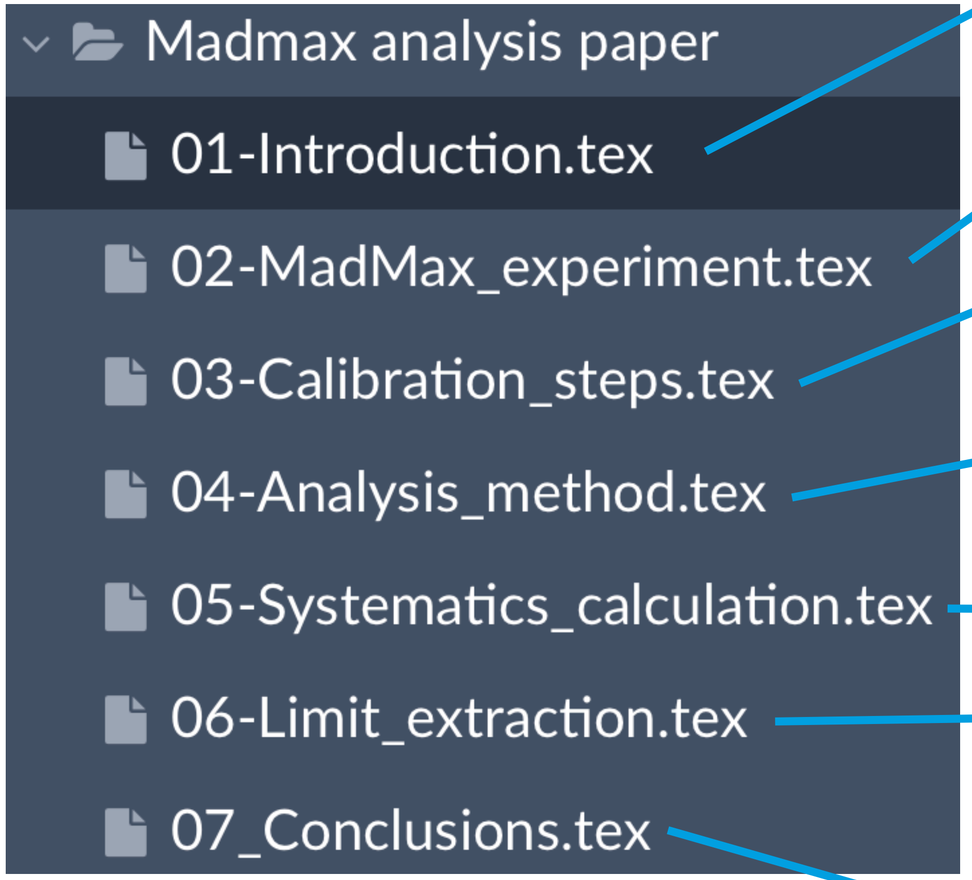
Paper status and publication path

Alberto Martini — DESY

Madmax Analysis week, MPP, 24-28 July 2023

Paper structure: proposal



Describe the physics concepts and motivation for Madmax

Describe the experiment as it was in 2022-2023 data-taking

Here, details on the geometry should be added

Describe the various measurements that have been done to extract the boost factor

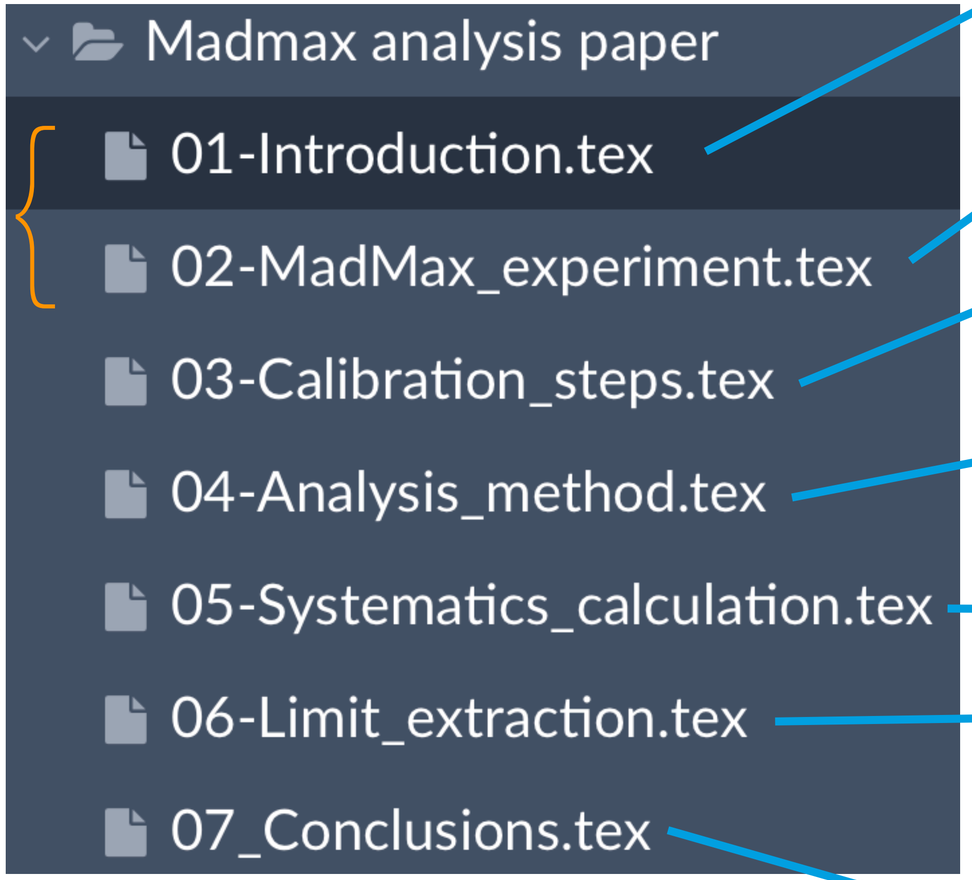
Describe the ADS (+ COMSOL) simulation(s), including the

Describe how we estimated systematic uncertainties, using a combination of measurements and simulations

Describe the statistical framework used to extract the final limit on $g_{a\gamma}$ and how we extract the final result

Just a recap and place for a statement about how good we did 😄

Paper structure with responsibilities: proposal



Alberto + Anton + all

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Bernardo + Juan(?)

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David

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David + Johannes

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Johannes + Vijay(?)

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Alberto + all

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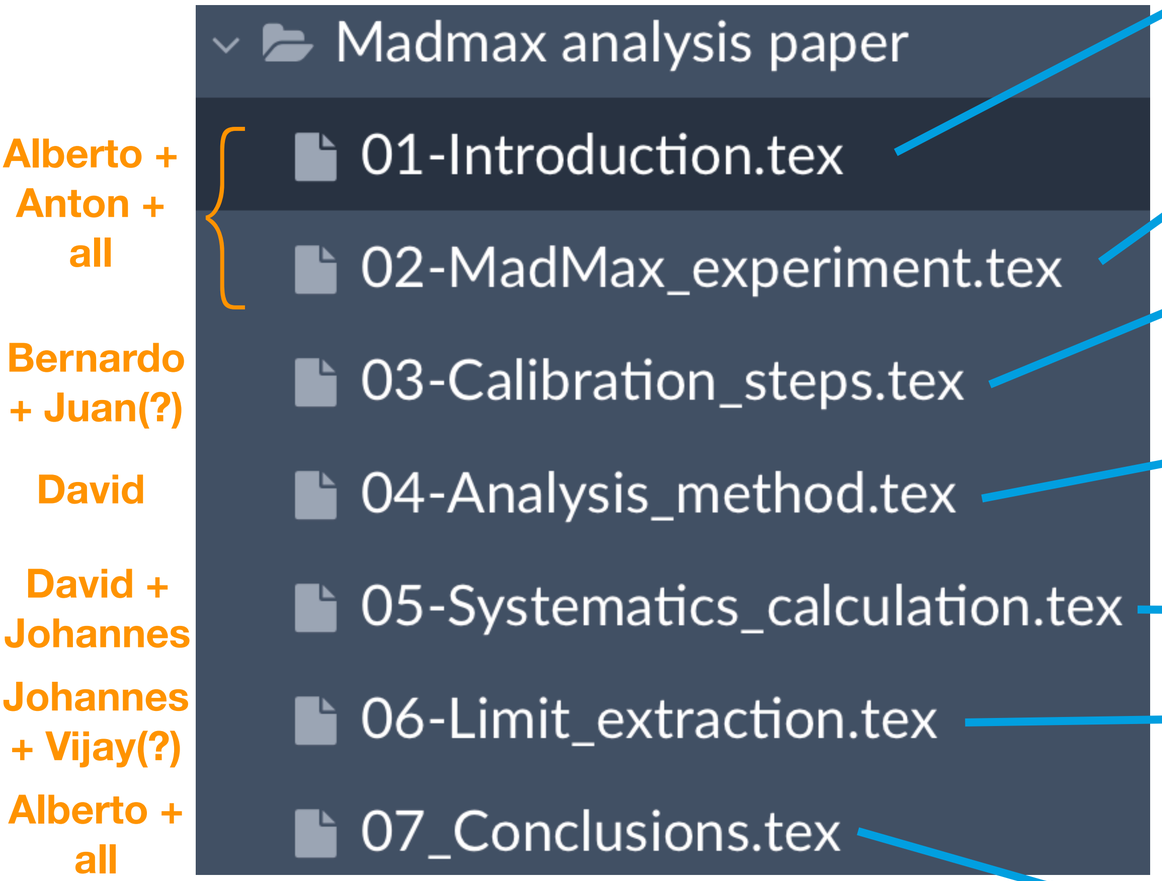
Paper status and future

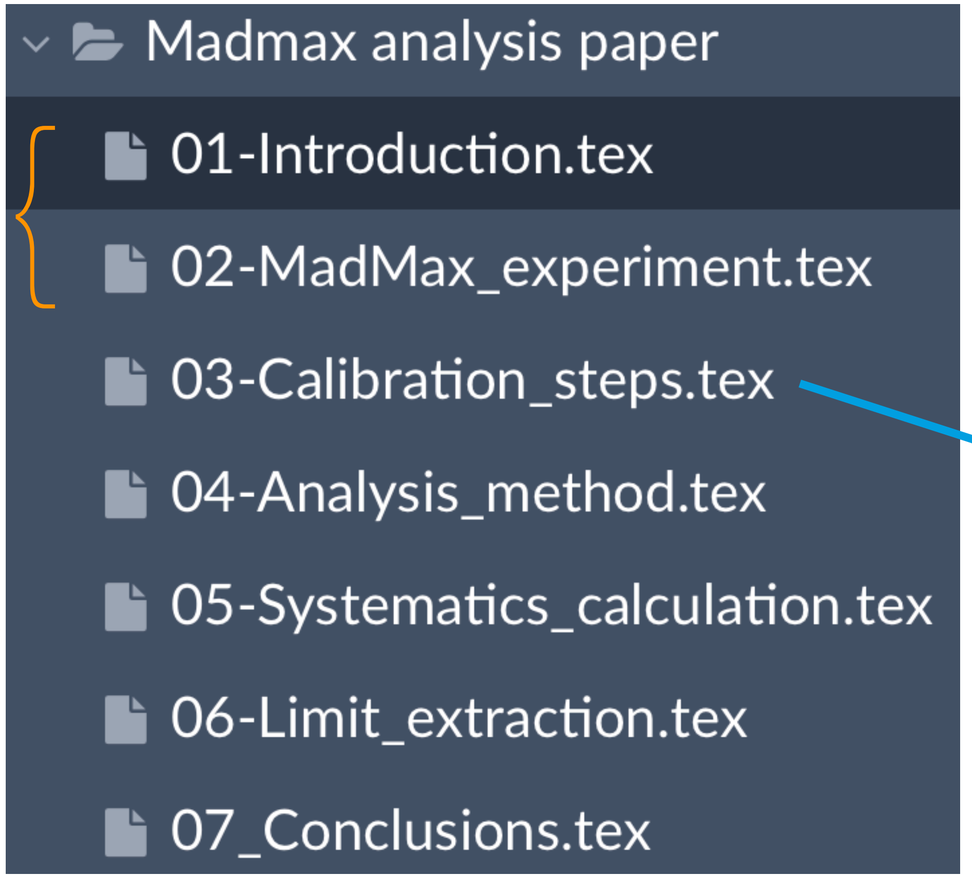


Alberto + Anton + all	01-Introduction.tex	Already started!	End of September
	02-MadMax_experiment.tex	Just barely started..	
Bernardo + Juan(?)	03-Calibration_steps.tex	To start	First messy draft by end of October
David	04-Analysis_method.tex	To start	
David + Johannes	05-Systematics_calculation.tex	To start	First evaluations by end of October
Johannes + Vijay(?)	06-Limit_extraction.tex	To start	First description-only draft by end of September-middle of October
Alberto + all	07_Conclusions.tex	To start	Very last thing to do but.. end of November

Target:

Work to do today - now

The goal is to **publish by December!**
Target journal: **EPJC**



Alberto + Anton + all

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David

David + Johannes

Johannes + Vijay(?)

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Let's try to define here and now a detailed structure of the sections

Structure example:

- SA measurements
  - Y-factor
- VNA measurements
  - Transmission line

Shared overleaf link to work together on this: