

# Johannes Diehl

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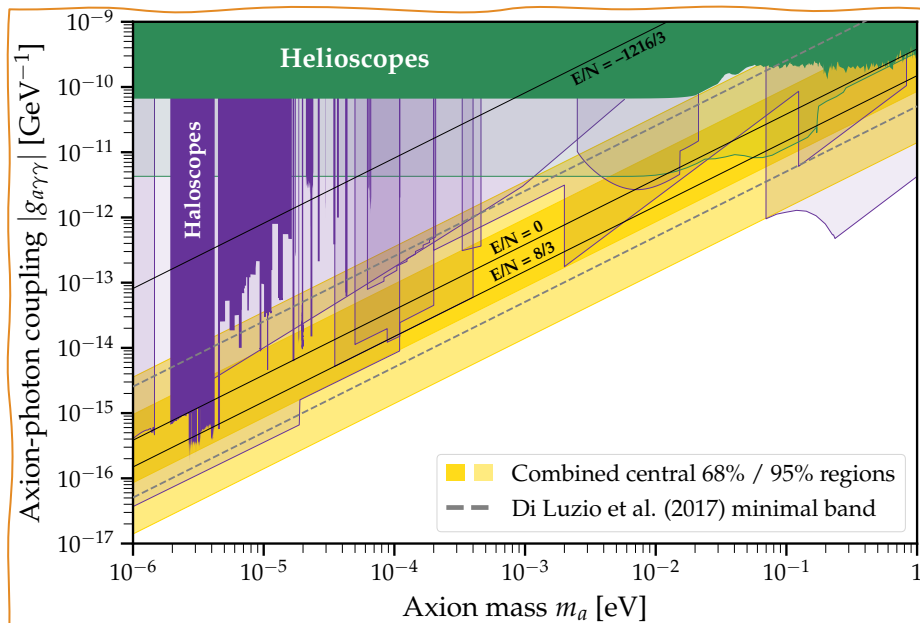
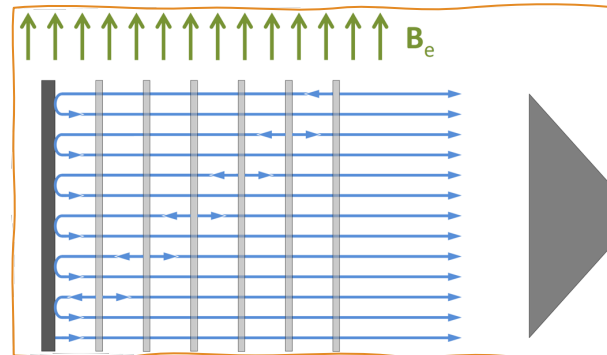
QCD Axion Phenomenology  
and Data Analysis for the  
MADMAX experiment



MAX PLANCK INSTITUTE  
FOR PHYSICS

## Magnetized Disk and Mirror Axion eXperiment

- Coherent photon emission from disks
- Constructive interference + slight resonance



## My focus

- Non-parametric background subtraction
- Stopping criterion
- Full Bayesian Analysis

Theoretical (prior) belief for non-minimal (DFSZ-type) QCD axion models  
arXiv: [2302.04667](https://arxiv.org/abs/2302.04667)

