

HIGH-ENERGY  
ASTROPHYSICS IN THE  
MULTI-MESSENGER ERA

# Exploring EeV Dark Matter through Pierre Auger observatory



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MAY 2023



# PROPOSAL

CAINÃ OLIVEIRA - IFSC/USP  
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## BEYOND WIMP MODEL:

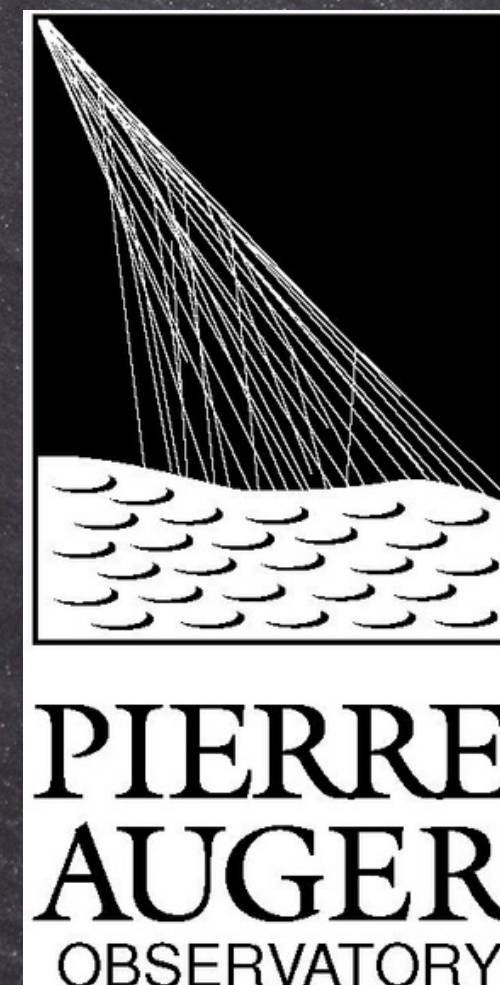
- EeV Dark Matter particle:  
Decaying DM;  
Long-lived.

## GENERAL IDEA:

- Constrain a DM particle decaying into cosmic rays through a possible dipole that would be generated by this decay.

TARGET: GALACTIC CENTRE  
DM decaying in cosmic-rays

## EXPERIMENT:



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