



# Search for a Dark Matter Signature with the Alpha Magnetic Spectrometer (AMS-02) Experiment

## Fact Sheet

### Project Information

DARKMATTERAMS

Grant agreement ID: 304264

Status  
Closed project


Start date  
1 March 2012

End date  
29 February 2016

Funded under  
FP7-PEOPLE

Overall budget  
€ 100 000

EU contribution  
€ 100 000

Coordinated by  
MIDDLE EAST TECHNICAL  
UNIVERSITY  
 Turkey

## This project is featured in...

RESEARCH\*EU MAGAZINE  
**Coping with the forces  
beneath the Earth's crust**

NO. 60, MARCH 2017

## Objective

Alpha Magnetic Spectrometer is a multi-purpose particle physics experiment that has been carried to the International Space Station with the launch of Space Shuttle Endeavour flight STS-134, that took place on 16th of May, 2011. AMS-02 was installed to its final position on the 19th of May, 2011 and has been taking cosmic-ray data since. AMS has already collected billions of particles in low earth orbit and is now under a calibration and data validation period. AMS will measure cosmic-ray spectrum for photons and charged particles, as well as for primary elements upto Fe with unprecedented accuracy. Specifically, the energy spectra of photons, electrons, positrons and anti-protons can contain signatures of dark-matter annihilation in the galactic halo and METU team will concentrate efforts on understanding these spectra.

## Field of science

/natural sciences/physical sciences/theoretical physics/particles

/natural sciences/physical sciences/theoretical physics/particles/photons

/natural sciences/physical sciences/astronomy/astrophysics/dark matter

## Programme(s)

## Topic(s)

## Call for proposal

FP7-PEOPLE-2011-CIG

## Funding Scheme

MC-CIG - Support for training and career development of researcher (CIG)

## Coordinator



### MIDDLE EAST TECHNICAL UNIVERSITY

Address

Dumlupinar Bulvari 1

06800 Ankara

 Turkey

[Website](#) 

Activity type

Higher or Secondary

Education Establishments

[Contact the organisation](#) 

EU contribution

€ 100 000

Administrative Contact

**Irem Dikmen Toker (Prof.)**

**Last update:** 2 August 2019

**Record number:** 102625

**Permalink:** <https://cordis.europa.eu/project/id/304264/>

© European Union, 2020