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## Direction and time dependent fluxes with AMS-02

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The Alpha Magnetic Spectrometer (AMS-02) is a state-of-the-art particle detector designed to operate as an external module on the International Space Station (ISS). In this unique space environment cosmic particles can be measured with high precision over an energy range from GeV up to a few TeV. In 2014, the AMS collaboration provided precise measurements of the electron and positron fluxes, which indicate an additional source of positrons among the various cosmic particles. The arrival directions of energetic  $e^\pm$  in the range of hundreds of GeVs convey fundamental information on their origin, whereas low energy  $e^\pm$  in the MeV to tens of GeV range are subject to time dependent solar modulations.

We evaluate the AMS-02 detector acceptance as a function of incoming angle in the detector frame. Using the detector pointing information over the entire AMS-02 data taking period, we build time dependent skymaps in galactic coordinates of the  $e^\pm$  incoming directions, as well as time dependent reference maps. The latter simulate the expected AMS-02 measurement of isotropic fluxes. Our maps allow us to study possible anisotropies in the arrival directions of energetic  $e^\pm$ , as well as time and direction dependent effects at low energies due to the influence of the solar wind. This technique can be applied to protons and other cosmic ray species. We demonstrate the performance of the method using AMS-02 data.

### Collaboration

AMS

### Registration number following "ICRC2015-I/"

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**Authors:** MERX, Carmen Maria (KIT - Karlsruhe Institute of Technology (DE)); GEBAUER, Iris (KIT - Karlsruhe Institute of Technology (DE)); ANDEEN, Karen Grace (KIT - Karlsruhe Institute of Technology (DE)); NIKONOV, Nikolay (KIT - Karlsruhe Institute of Technology (DE)); ZEISSLER, Stefan (KIT - Karlsruhe Institute of Technology (DE)); VAGELLI, Valerio (KIT - Karlsruhe Institute of Technology (DE))

**Presenter:** GEBAUER, Iris (KIT - Karlsruhe Institute of Technology (DE))

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