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## Indirect searches for Dark Matter with AMS02

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AMS02 is a multi-purpose spectrometer with superconducting magnet, designed for 3 years of data taking aboard the International Space Station. Its high performance regarding particle identification and energy measurement will allow performing indirect searches for dark matter (DM) in different channel simultaneously: gamma rays, positrons, antiprotons and hopefully antideuterons. A new spectrum generator, based on the public package micrOMEGAs is being developed for the computation of those signals. It includes cross section computations, dark halo modelling and charged particles Galactic propagation handle. This tool is presented, together with a novel method for the quantitative prediction of boost factors. These are expected to be caused by DM substructures, a specific class of which is considered. We show that DM spike formation around intermediate mass black holes can lead to dramatic enhancement of the signals. These studies allow to determine the AMS02 sensitivity to new physics, which is eventually presented.

**Author:** Dr BRUN, Pierre (Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP))

**Presenter:** Dr BRUN, Pierre (Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP))

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