

# **The Alpha Magnetic Spectrometer (AMS) experiment on the International Space Station**

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One of the fundamental unanswered questions concerning the structure and composition of the universe is whether antimatter of cosmological origin exists in the universe today. Another mystery concerns the missing matter in our universe. The Alpha Magnetic Spectrometer (AMS) is a detector designed to operate in space to search for antimatter components in cosmic ray, the annihilation products of dark matter, and to study the antiprotons, positrons and light nuclei. The complete AMS is programmed for installation on International Space Station in year 2004 for an operation period of 3 years. In this report, we will discuss the experimental configuration of AMS, and the current activities from Korean AMS group.