



Departamento de Investigación Básica

Madrid, 15 December 2017

To whom it may concern,

This is to certify the contributions from Prof. ZHENG Zhiming and Prof. SHAN Baosong to the AMS-02 publication "First Result from the Alpha Magnetic Spectrometer on the International Space Station: Precision Measurement of the Positron Fraction in Primary Cosmic Rays of 0.5–350 GeV".

They play important roles in the AMS Science Operation Center (SOC), and Prof. Shan is the leading expert of SOC. Their responsibilities and contributions include:

- 1. Design, development and maintenance of the AMS offline software;
- 2. Design, development of the production platform for AMS computing centers;
- 3. Coordination of the data production and Monte-Carlo simulation.

In April 2013, the experiment published "First Result from the Alpha Magnetic Spectrometer on the International Space Station: Precision Measurement of the Positron Fraction in Primary Cosmic Rays of 0.5–350 GeV" as the Viewpoint of Physics Review Letters.

Based on their important contributions in data production and simulation, I support Prof. ZHENG Zhiming and Porf. SHAN Baosong to apply for a Chinese National Natural Award based on this paper.

Sincerely yours.

Manuel Aguilar-Benítez,

Former Scientific Spanish Delegate and Vice President of the CERN Council Member of the Spanish Royal Academy of Sciences