

## THE AME2016 ATOMIC MASS EVALUATION

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The atomic mass is a fundamental property of nuclei that is widely used in basic nuclear physics and astrophysics research and in many practical applications, such as nuclear energy. The Atomic Mass Evaluation (AME) is the most reliable source for comprehensive information related to the atomic masses. It provides the best values for the atomic masses and their associated uncertainties by evaluating all available experimental data from nuclear reactions, radioactive decays and direct mass measurements using a weighted, least-squares method approach.

Since the last AME publication in December 2012, the experimental knowledge of atomic masses has been continuously expanding along two main directions, including: measurements aimed at high-precision mass values and at the most exotic nuclei far from the stability. The next AME version is envisioned to be published at the end of 2016 where all data published in the main nuclear physics journals by the end of May 2016 will be included. At this conference, the present status of AME and the impact of new mass measurements will be reviewed and presented.