

Ongoing developments at the Decay Data Evaluation Project

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Abstract:

The Decay Data Evaluation Project (DDEP) is an international collaboration providing easy-to-use and reliable decay data recommendations. It was originally founded in 1994 between two National Metrology Institutes (NMIs) for ionising radiation: the *Laboratoire National Henri Becquerel* (LNE-LNHB) in France and the *Physikalisch-Technische Bundesanstalt* (PTB) in Germany. The collaboration was later strengthened through the addition of laboratories from the US, China, Romania, Russia, Spain and the UK. Beyond the initial scope of ionising radiation metrology, the DDEP recommendations are used for a wide variety of topics, from fundamental physics to nuclear medicine applications. Most notably, almost all 220 DDEP evaluations are included in the version 3.3 of the radioactive decay data library from the Joint Evaluated Fission and Fusion (JEFF) file project of the OECD Nuclear Energy Agency.

An overview of the DDEP collaboration will be presented. The evaluation process and recommendations will be detailed as well as the various dissemination media available. In particular, the recent update of the LNHB website, and the associated online tool *Laraweb* will be highlighted. The current status of DDEP, as well as the future updates and developments will be presented, in particular the possible inclusion of total absorption gamma-ray spectroscopy (TAGS) measurements. The production of the future JEFF-4 Radioactive Decay Data Library will also be discussed.