

Abstract Submitted
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A re-evaluation of the energy released in fission that is converted into heat in a nuclear reactor¹ ALEJANDRO SONZOGNI, ELIZABETH MCCUTCHAN, ANDREA MATTERA, National Nuclear Data Center, Brookhaven National Laboratory — A number of authors have studied the problem of calculating the energy released following the neutron-induced fission that can be converted into heat in a nuclear reactor. These energy values are needed to estimate a nuclear reactor fission rate from its thermal power value. In particular, for nuclear reactor antineutrino experiments, these values are of relevance to normalize the measured IBD spectrum and yield. In this work we will focus on a consistent and well-documented method to obtain above mentioned energies for the thermal neutron induce fission of ^{235}U , ^{239}Pu and ^{241}Pu , and for fast neutrons on ^{238}U . The latest available fission yield data and models are used, and realistic estimates of their uncertainties are obtained. Results will be compared with those from the 2004 work of Kopeikin *et al.* and the 2013 work of Ma *et al.*

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