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## Alpha heating and isotopic mass scaling in JET DT plasmas

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Experiments to detect alpha heating were performed in TFTR (1994) [1] and in JET (DTE1 1997 [2]). The TFTR results were claimed to be consistent with alpha particle heating of electrons. The JET results were claimed to show that alpha particle heating had been unambiguously observed. Recent papers [3,4] reanalyzed the alpha heating and other discharges from the JET DTE1 using improved TRANSP analysis. One result [3] is that although alpha-electron heating most likely was occurring, thermal hydrogenic isotopic mass  $\langle A \rangle$  effects could explain most of the effects attributed to alpha heating, and thus alpha heating was not clearly demonstrated. There are plans for new experiments in JET to investigate alpha heating and  $\langle A \rangle$  effects. ITER plans to study these during the DT phase after 2034. To help prepare for these, further analysis including more discharges from the JET DTE1 campaign are studied. Examples are pairs studied in [5]. Correlations of sawtooth delay times and core temperatures with fast ion parameters are presented.

JET contributors are listed in the appendix of [6]. This work has been carried out within the framework of the EUROfusion Consortium, and has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 633053. The views and opinions expressed herein do not necessarily reflect those of the European Commission. This work was also supported in part by the US DoE contract No. DE-ACO2-76-CHO3073.

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