EX/P4-32 : merging plasma startup experiment in MAST
~global ion heating by the dissipation of reconnection outflow~

Typical waveform of a CS-less startup scenario by merging/compression method

![Graph showing plasma waveform with merging and steady scenarios](image)

P. Browning et al., PPCF 58, 014041 (2015)
~Two fluid modeling of reconnection heating~

Ion heating by released $B_{rec}^2 \propto B_p^2 \propto I_p^2 \propto I_{p3}^2$

~Experimental results of reconnection heating~

![Graph showing ion temperature increase](image)

$T_i[eV]$

0 10 100 1000 10000

$\Delta T_i[eV]$