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(a) Schematic view of magnetic field lines and plasma flows of two merging ST plasmas in TS-6, (b) radial profiles of ion velocity along  $Z = 2.1$  cm (blue allows) and along  $Z = -2.1$  cm (red allows) measured by our new probe array and poloidal flux contours, (c) radial profiles of ion temperature along  $Z = 2.1$  cm (blue lines) and along  $Z = -2.1$  cm (red lines) measured by our new probe array.

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