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Analysis of instabilities in merging plasma jets[1] S.A. GALKIN, I.N. BOGATU, J.S. KIM, FAR-TECH, Inc., V.I. SOTNIKOV, URN — High velocity (10-100 km/s) high density (10^{16}-10^{18} cm^{-3}) plasma jets are proposed to form plasma liner to compress magnetized plasma target and to reach MIF conditions [1]. Merging of such plasma jets may cause instabilities, which can affect/destroy the plasma liner formation. 2D/3D numerical simulations of plasma jets merging/colliding were performed with PIC LSP and hybrid DOLPHIN codes. Results of simulations and nature of instabilities will be presented. [1] Y. C. F. Thio, E. Panarella, R. C. Kirkpatrick, C. E. Knapp, F. Wysocki, "Magnetized Target Fusion in a Spheroidal Geometry with Standoff Drivers," Current Trends in International Fusion Research II, ed. E. Panarella, National Research Council Canada, Ottawa, 1999.

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