

Abstract Submitted
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Development of a Self-Clearing MITL Topology MATTHEW MARTIN, ANDREW PORWITZKY, DANIEL DOLAN, Sandia National Labs — Recent experiments on the Z facility at Sandia National Labs have demonstrated significant plasma outflows onto the surface of our fusion targets when the load current exceeds 10MA. These plasmas are believed to be sourced at the inner MITL from both hydrocarbon contamination and the metal of the MITL itself. We present simulations and the initial experimental results of a new MITL topology that attempts to minimize the production and transport of shorting plasma in the inner MITL, leading to improved current delivery and compression in magneto inertial fusion experiments at the Z facility.

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