

## **SUPPRESSED INSTABILITY GROWTH IN SEEDED KINK Z-PINCHES**

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Among the limiting factors preventing the achievement of maximum energy density in Z-pinches is the turbulence generated from instabilities, such as the sausage and kink. The kink instability can be stimulated by introducing a thin helical obstacle on the axis of the pinch. Imploding a conical wire arrays with this obstacle creates a sheared axial flow that interacts with the developing kink instability. Experiments involving conical and cylindrical wire arrays were conducted at the Nevada Terawatt Facility in order to investigate the growth of the seeded instability. Observations show that the kink instability was indeed suppressed for conical wire arrays.

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