Abstract Submitted
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The motional Stark effect diagnostic reliably measures significant deviations in safety factor profile during DIII-D sawteeth[1] W.W. HEIDBRINK, UC Irvine, BRIAN VICTOR, LLNL — Motional Stark effect (MSE) data acquired during large fast-ion stabilized sawteeth are critically reexamined. The safety factor at the sawtooth crash changes by $\Delta q \simeq 0.15$, much more than any likely errors, indicating that substantial reconnection occurs at these sawtooth crashes. The absolute magnitude of the central safety factor after the crash is less certain: $q_0 \simeq 0.90$-0.97 with an uncertainty of ~ 0.05.

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