

Abstract Submitted  
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**Mechanism of Counter Current Flow with Lower-Hybrid-Driven Current**<sup>1</sup> XIAOYIN GUAN, HONG QIN, NATHANIEL FISCH — Strong counter current plasma flow has been observed in the Alcator C-Mod with Lower Hybrid Current Drive (LHCD). An investigation of the momentum source of the flow indicates that an improvement of electron momentum confinement is the possible reason of the counter-current spinning up. Simulations of counter-current flow generation are carried out by applying a simplified momentum transport model with a two-fluid equation system. Numerical results agree well with the experimental data of the Alcator C-Mod.

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