Abstract Submitted for the DPP10 Meeting of The American Physical Society

Influence of the Plasma Shape on the Pinch Effect on Axisymmetric Tokamaks ENRIQUE CASTRO, PABLO MARTIN, Universidad Simon Bolivar — Numerical calculations of Ware-pinch effect in general plasma configution are considered. Though analytical treatment of Ware-pinch in plasma configurations including ellipticity and triangularity were presented previously, however, applications of these equations to actual tokamaks are very important and not presentations have been done until now using this technique. Curvilinear coordinates described in previous papers are used [1-4]. This work is justly dedicated to fill out this matter and numerical calculations have been carried out for different tokamaks with different geometry parameters. First, the effect of ellipticity is considered and later triangularity influences are also included in our calculations. Graphics results will be presented.

[1] P. Martin, E. Castro and M. Haines, Phys. Plasmas 14, 052502 (2007)

[2] P. Martin and M. Haines, Phys. Plasmas 5, 410 (1998)

[3] P. Martin Phys. Plasmas 7, 2915 (2000)

[4] P. Martin and E. Castro, Proceedings of 35th Plasma Physics Conference, <u>32</u> (2008) P- 5.042

Enrique Castro Universidad Simon Bolivar

Date submitted: 08 Jul 2010

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