Plasma Rotation Profile Measurements in C2 FRC XUAN SUN, Tri Alpha Energy, Inc, DEEPAK GUPTA, MICHEL TUSZEWSKI, HOUYANG GUO, AND THE TAE TEAM — Field Reversed Configuration (FRC) holds a promising future for commercializing thermonuclear power. However, n=2 rotational instability appears virtually in every FRC plasma and degrades their performance. The exact mechanism to generate and accelerate the rotation is still a puzzle. In this presentation, we attempt to investigate this puzzle by measuring the rotation profile in C2’s core plasma, scrape-off layer, and exhaust region with Mach probe and Doppler spectrometer.