

Abstract Submitted
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Observations of geodesic acoustic modes and low-frequency zonal flow in the edge of HL-2A and HT-7 tokamaks¹ T. LAN, C.X. YU, H.L. ZHAO, D.F. KONG, A.D. LIU, USTC, China, L.W. YAN, WENYU HONG, K.J. ZHAO, J.Q. DONG, J. QIAN, J. CHENG, D.L. YU, Q.W. YANG, X.R. DUAN, SWIP, China, B.N. WAN, X. GAO, J.G. LI, IPP, China — Zonal Flows, including Low-Frequency Zonal Flow (LFZF) and geodesic acoustic mode (GAM), had both been characterized in the HL-2A tokamak and the HT-7 tokamak. The radial spectral features of GAM fluctuations were measured using two radial rake probe arrays separated toroidally. The GAMs with a fixed mode frequency were located within a radial distance inside the LCFS; the amplitude, radial wavenumber, phase velocity and group velocity profiles had all been measured. The radial wavenumber of GAM had been observed to decrease with increasing radial position. The group velocity of GAM had also been observed to spread outward with a tuning position from which the GAM propagated inward. The spectral characteristics of density and electron temperature fluctuations of GAM had been studied in detail as well.

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