

Abstract Submitted
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The generation and radial propagation of geodesic acoustic mode in HL-2A and HT-7 tokamak¹ T. LAN, D.F. KONG, A.D. LIU, H.L. ZHAO, H.G. SHEN, H. LI, W.D. LIU, C.X. YU, USTC, China, J. CHENG, L.W. YAN, J.Q. DONG, W.Y. HONG, SWIP, China, W. ZHANG, R. CHEN, G.S. XU, B.N. WAN, ASIPP, China — Two geodesic acoustic modes (GAMs) with different mode frequencies, named as high frequency GAM (HFGAM) and low frequency GAM (LFGAM), are observed in the edge of HL-2A and HT-7 tokamaks. The mode frequencies of these two GAMs are constant in the whole measurement range. The radial wavenumber profiles of these two GAMs are measured. The radial wavenumber of HFGAM branch keeps positive, which means propagating outward, and become larger when radial position increasing. The radial wavenumber of LFGAM changes sign at about radial position $r - a = 0.8\text{cm}$ from negative to positive. The envelop analysis applied on LFGAM and HFGAM shows that the LFGAM is generated locally and HFGAM comes from the deeper plasma.

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