

Three different experimental methods to search for invisible axion emitted in the nuclear magnetic transitions are presented. 1) The method of missing γ -ray in nuclear magnetic transition was used to search for invisible axion emitted in M1-transition of isomeric nuclei ^{125m}Te . 2) The resonant absorption of solar axions by ^7Li nuclei, which is accompanied by the excitation of the first nuclear level of lithium, was searched for with Ge-detector surrounded by a lithium target. 3) Results of background measurements with the Borexino CTF were used to search for 478 KeV solar axions emitted in the M1-transitions of $^7\text{Li}^*$. The sensitivity of CTF to the Compton conversion of axion to a photon $A+e\rightarrow e+\gamma$, axioelectric effect $A+e+Z\rightarrow e+Z$, decay of axion in two photons $A\rightarrow 2\gamma$ and Primakoff conversion on nuclei $A+Z\rightarrow \gamma+Z$ are considered.