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## 750 MHz IH-DTL for a proton therapy linac

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750 MHz IH-DTL with the capability to accelerate protons from 3 to 10 MeV was proposed for the compact therapy linac that now under development in IMP. Four drift tube sections were housed in a single vacuum chamber and coupled with three large drift tubes which housing focusing triplet lens inside. In each drift tube section, there were 9 to 10 drift tubes, supported by the separated ridges. This cavity will be powered by a 1 MW klystron at 0.1% duty cycle, the  $k_p$  factor is about 1.7 at the operation power level. The tank is now under construction and expected to be ready for beam commissioning in the middle of 2023. The overall cavity design and the status of the power cavity are presented in this paper.

### Funding Agency

### Footnotes

### I have read and accept the Privacy Policy Statement

Yes

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