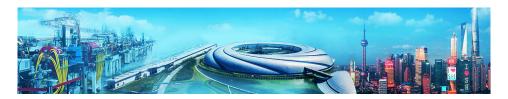
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Optimization of Pulse modulator for SXFEL

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In this oral report, the design of pulse modulator at SINAP is presented. The stability of RF system is one of the major factors to get great beam performance. It is mainly determined by a low level RF driving system and klystron modulators. The beam voltage of klystron, which is the pulsed voltage of pulse modulator, is directly affecting the amplitude and phase of klystron output RF waveform. This oral report summaries the methods used for improve the performance of modulator at SINAP. These methods mainly includes upgrading of CCPS, trigger system, heater power supply and reducing EMI leakage. To achieve better performance, we design an oil filled modulator which is used for 50MW X-band klystron. An introduction about this modulator design is given at last.

Author: LIU, Yongfang (SINAP)

Presenter: LIU, Yongfang (SINAP)

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