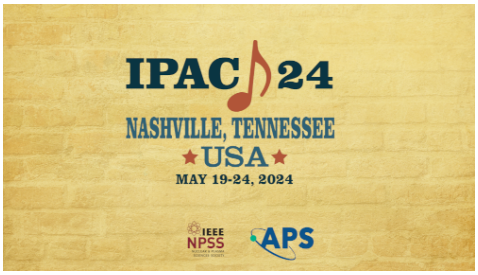


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# Development of normal conducting heavy ion linac in China

*Monday, 20 May 2024 16:00 (2 hours)*

Research on heavy ion linac was began more than ten years ago to improve the HIRFL operation. In China, the first continuous wave (CW) heavy ion linac, SSC Linac, working at 53.667 MHz was designed and constructed as the SSC injector. The ion particle can be accelerated to 1.48 MeV/u with the designed A/q=5.17. At present stage, this CW linac has been put into operation and the Uranium has been accelerated to 1.48 MeV/u successfully in the end of 2023. To meet the rising requirements of the applications, a compacter 162.5 MHz heavy ion linac operating in pulse mode was developed with A/q≤3. The "KONUS"beam dynamics was adopted in the IH-DTL design and the heavy ions can be accelerated to 4 MeV/u in 9 m length. The 108.48 MHz SESRI linac was another pulse machine which was built at Harbin. Both of the heavy ions and proton beam can be accelerated by this linac to 2 MeV/u and 5.6 MeV,respectively. In this paper, the status of these three heavy ion linacs and their beam commissioning results were reported.

## Footnotes

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