

## 飞行时间法测量脉冲堆热柱孔道热中子能谱

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**摘要** 文章介绍飞行时间法测量中子能谱的基本原理, 给出脉冲堆热柱孔道飞行时间谱测量实验的系统设计及时间谱测量结果, 利用自行研制的解谱程序求解飞行时间法测量的热柱孔道热中子能谱分布。结果表明, 测量能谱较Thermal Maxwellian理论谱偏软, 谱峰对应的中子能量为 $(24.8 \pm 7.2)$  meV。

**关键词** [飞行时间法](#) [热中子能谱](#) [脉冲堆](#)

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## Thermal Neutron Spectrum in Thermal Column of Pulse Reactor Measured Techniques With Time of Flight Method

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**Abstract** The basic principle of neutron spectrum measured with time of flight method was introduced. The design of experimental device for the time of flight spectrum in the thermal column of the pulse reactor measurement was given, and the time spectrum measured result was shown at the same time. In the end, the measured thermal neutron spectrum of the thermal column resolved by the selfmade programs was offered. The experiment results prove that the measured spectrum is a little softer than Thermal Maxwellian theory spectrum, the neutron energy value corresponding with the measured spectrum peak point is about  $(24.8 \pm 7.2)$  meV.

**Key words** [time of flight method](#) [thermal neutron spectrum](#) [pulse reactor](#)

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