

## 注入聚束腔的离子束的能量分散对直线加速器输出束流波形的影响

@张华顺\$中国科学院高能物理研究所!北京 100039

收稿日期 1989-12-12 修回日期 网络版发布日期:

**摘要** <正> 一、理论分析 众所周知,在质子直线加速器前常用聚束腔来提高加速器的捕获效率。从聚束腔至加速器入口有一段聚束漂移空间,如图1所示。

**关键词** [质子直线加速器](#) [聚束](#)

分类号

### THE EFFECT OF ENERGY SPREAD OF IONS INJECTING INTO THE BUNCHER ON THE OUTPUT BEAM CURRENT WAVEFORM OF LINAC

ZHANG HUASHUN(Institute of High Energy Physics, Academia Sinica, P. O. Box 918, Beijing, 100039)

**Abstract** It has been discovered by experiment and quantitatively proved by theoretical deduction that the energy spread of ions injecting into the buncher effects on the output beam current wave form of linac. The analytical relations of the effects of the energy spread of ions injecting into buncher,the instabilities of the amplitude and phase of the high frequency electric field in buncher tank on the output beam current from linac are given.

**Key words** [Linac](#)[Buncher](#).

DOI

#### 扩展功能

##### 本文信息

▶ [Supporting info](#)

▶ [\[PDF全文\]\(301KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

##### 服务与反馈

▶ [把本文推荐给朋友](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

##### 相关信息

▶ [本刊中 包含“质子直线加速器”的相关文章](#)

▶ [本文作者相关文章](#)

通讯作者