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核物理实验数据的离线分析程序

@肖志刚\$中国科学院近代物理研究所!甘肃兰州730000 @姚楠\$中国科学院近代物理研究所!甘肃兰州730000 @王宏伟\$中国科学院近代物理研究所!甘肃兰州730000 @靳根明\$中国科学院近代物理研究所!甘肃兰州730000 @吴和宇\$中国科学院近代物理研究所!甘肃兰州730000 @段利敏\$中国科学院近代物理研究所!甘肃兰州730000

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摘要 在FortranPowerStation环境下编制了一用于多参数核物理实验的离线数据分析程序。该程序支持多种输入输出数据格式,并提供用户子程序调用入口,完成所需的event by event分析计算,并提供多边形条件、二维谱线性化、软件分除、计数器、谱累加等常用功能函数。程序可用来完成原始数据的挑选、压缩和物理分析等任务,具有良好的通用性和实用性

关键词 [离线](#) [用户子程序](#) [event-by-event](#) [功能函数](#)

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Off-line Analysis Program of Experimental Data in Nuclear Physics

XIAO Zhi gang, YAO Nan, WANG Hong wei, JIN Gen ming, WU He yu, DUAN Li min (Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou 730000, China)

Abstract An off line data analysis program of multiparameter experiments in nuclear physics is developed in Fortran Power Station environment. It is adapted to many kinds of data format with great flexibility, enables the user to perform complex manipulations in the event by event analysis by means of user's favorite subroutine which can be modified to his specifications and linked to the program. Moreover, many powerful functions encapsulated in the program, such as polygonal condition, linearization of 2 dimensional plot, fraction dividing, counter and spectrum increment etc., can be invoked by user, helping to make some common operations. Many tasks, including selection and compression of experimental data and physics analysis can be carried out with ease by using this application.

Key words [off line](#) [user's favorite subroutine](#) [event by event](#) [powerful function](#)

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通讯作者

扩展功能

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