Software for On-line Heavy Ion Beam Energy Measurements

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Abstract

Our scientific group is engaged in series of experiments on the fission of superheavy nuclei formed in the reactions with heavy ions delivered by the accelerator U-400 of the Flerov Laboratory of Nuclear Reactions (JINR, Dubna). The experiments require high precision of beam energy measurement, so we have to develop a special setup for energy measurement. As the part of this setup was created software for PC. The program package is developed with the use of object-oriented programming language Microsoft Visual C++ and Microsoft Foundation Classes library. The software is designed for Microsoft Windows 2000 operating system and includes interface to CAMAC with setup management functions, calculation part and visualization functions.