Contribution ID: **23** Type: **Oral**

LONG RANGE PLANE WITH RADIACIVE BEAMS AT DUBNA

Monday, 21 May 2012 17:30 (20 minutes)

The new project of the in-flight fragment separator ACCULINNA-2 [1] at U-400M cyclotron in Flerov Laboratory of Nuclear Reaction, JINR is proposed as the third generation of the Dubna Radioactive Ions Beams complex, briefly DRIBs [2]. It is expected to be a more universal and powerful instrument in comparison with existing separator ACCULINNA [3]. The RIBs intensity should be increased by factor 15 (factor 6 - via angular acceptance and factor 2.5 –via more intensive primary beams of upgraded cyclotron), the beam quality greatly improved and the range of the accessible secondary radioactive beams broadened up to Z~20. The new separator will provide high intensity RIBs in the lowest and wide energy range attainable for in-flight separators, i.e. E ≈ 5÷50 MeV/nucleon. The prime objectives of ACCULINNA-2 are to provide good energy resolution and high efficiency for correlation measurements. Extensive research program which could be carried out at this facility as from 2015 and its operating principle are foreseen.

1. A.S. Fomichev et al., JINR Communication E13-2008-168, Dubna (2008)
2. http://159.93.28.88/flnr/dribs.html; http://159.93.28.88/dribs/publ.html
3. A.M. Rodin et al., Nucl. Instr. and Meth. B 204 (2003) 114-118; http://aculina.jinr.ru/

Primary author: Dr FOMICHEV, Andrey (FLNR JINR)

Presenter: Dr FOMICHEV, Andrey (FLNR JINR)

Session Classification: Future RIB Facilities

Track Classification: Future RIB facilities