

[A.Barnyakov](#), [A.Levichev](#), [D.Nikiforov](#), BINP SB RAS, Novosibirsk, RUSSIA. [M.Maltseva](#), NSU, Novosibirsk, RUSSIA.

## Abstract

## INTRODUCTION

## SCHEME OF THE INJECTOR

Electrodynamic characteristic calculations of the electron gun accelerating cavities were carried out by means of software package CST Studio. The cavity consisting of 1.5 accelerating cells with the oscillation mode of  $\pi$  was used. Coaxial cavity includes the RF triode. As the triode GS-34 (developed in Russia) was used since it has the enough high emission.

## PARTICLE DYNAMICS

Figure 1 is a histogram showing the distribution of the ratio  $N/N_{\text{max}}$  [%] versus the maximum energy  $W_{\text{max}}$  [MeV]. The x-axis ranges from 3 to 3.25 MeV, and the y-axis ranges from 0 to 10%. The distribution is highly peaked around 3.05 MeV, reaching a maximum value of approximately 9.5%.

## CONCLUSION

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