

**Status of 7 GHz Pulsed Magnicon Amplifier and
Achieved Results***

E.V. KOZYREV,
O.A. NEZHEVENKO, A.A. NIKIFOROV,
G.N. OSTREIKO, B.Z. PERSOV,
G.V. SERDOBINTSEV, S.V. SHCHELKUNOFF,
V.V. TARNETSKY, V.P. YAKOVLEV,

I.A. ZAPRYAGAEV - The report presents experimental results obtained on 7 GHz pulsed magnicon amplifier and planes of its future investigations. This magnicon was developed at INP as a prototype of a microwave power source for the next generation of linear colliders. 55 MW output power and efficiency of 56% were the design goals. The tube operates in frequency-doubling mode of the drive signal. At present time the following parameters have been achieved: maximum output power of 46 MW at 1 microsecond pulse duration, efficiency of 49 %, and gain of 62 dB.

* Work is supported by Russian Fund of Fundamental Investigation.