STUDY OF THE TEV GAMMA-RAY SPECTRUM OF SN1006 AROUND THE NE RIM

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The differential spectrum of TeV gamma rays between 1.5 TeV and 20 TeV from the north-east rim of SN1006 has been obtained using data from observations with the CANGAROO-I 3.8m \v Cerenkov telescope. The result agrees well with the model based on the Inverse Compton (IC) process with the 2.7K Cosmic Microwave Background (CMB). This fit enables us to determine the absolute strength of the magnetic field around the shock and the maximum energy of accelerated electrons accurately: the field strength and maximum electron energy thus obtained are 4+-1 micro Gauss and 50 TeV respectively. Here we discuss the parent particles of the TeV gamma rays from SN1006, and describe new SN1006 data obtained with the CANGAROO-II 10m telescope.