

'Tesla Test Facility' Stripline Readout System,
M. CASTELLANO, P. PATERI, F. TAZZIOLI,
INFN-LNF, L. CATANI, INFN-LNF and INFN-Tor
Vergata - The beam diagnostic area of TTF and the
related transfer line will be equipped with stripline
beam position monitors. The system is required to
provide a spatial resolution $< 100 \mu\text{m}$ and time
resolution $< 1 \mu\text{s}$ with average macropulse current of
8 mA. The micropulse repetition rate will be 216 MHz
in the first stage of operation and 1 MHz when a new
injector will be installed. The four parallel channel
electronic readout uses a down-conversion stage from
216 to 50 MHz, followed by an amplitude to phase
converter and a phase detector. Channel matching,
temperature and long term stability are discussed.