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Electron Identification up to 100 GeV by means of
Transition Radiation

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We report on measurements with different transition radiation detector configurations, which were performed with the aim of pion-electron-discrimination in the momentum range between 1 GeV/c and 100 GeV/c. The test set-up consisted of 4 polypropylene fibre radiators with proportional wire chambers as photon detectors. We tested about 50 combinations varying the diameter of the fibres, the density of the radiators and the thickness of the chambers.

Results of measurements performed at a DESY testbeam at energies between 0.5 GeV and 6.5 GeV, and of extrapolations to particle momenta up to 100 GeV/c are discussed. At 90% electron efficiency a pion contamination of a few percent can be achieved over the full energy range.

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A DRIFT CHAMBER FOR CMD-2 DETECTOR AT VEPP-2M

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The construction and performance of jet-type drift chamber for CMD-2 detector at the Novosibirsk e^+e^- storage ring VEPP-2M is described. The chamber contains 512 two-coordinate signal wires. With prototype the spatial resolution of $120 \mu\text{m}$ on drift coordinate and 3 mm on Z-coordinate have been achieved with the gas mixture Ar + 5% CO₂.