## Quark Confinement and the Hadron Spectrum XI



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## The inclusive production of the meson resonances in neutrino-nucleon interactions

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The inclusive production of the meson resonances  $\rho^0(770)$ ,  $f_0(980)$ ,  $f_2(1270)$ ,  $K^{*+}(892)$  in neutrino-nucleon interactions has been studied with the NOMAD detector. The detector was exposed to the wide band neutrino beam generated by 450-GeV protons at CERN SPS. For the first time the  $f_0(980)$  meson is observed in neutrino interactions. The presence of  $f_2(1270)$  in the neutrino interactions is reliably established. The average multiplicity of these three resonances is measured as a function of several kinematic variables. The experimental results are compared to the multiplicities obtained from a simulation based on the Lund model. Matrix element of spin density matrix for  $K^{*+}(892)$  meson have been measured.

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