Título: Flavor number violating processes in the 3-3-1 model. Palestrante: Dr. Javier Montano Domínguez (IFT-Unesp)

Abstract:

We study phenomenology of flavor number violating processes in the context of the 3-3-1 model with sterile neutrinos. We present the leptonic tree level decays \$I_i\to I_jI_kI_k\$, where \$I_i=\mu,\tau\$, \$I_{j,k}=e,\mu\$, and we found that \$\mu\to eee\$ impose a lower mass limit on the vector doubly charged bilepton of \$4.58\$ TeV and that the scalar contributions are negligible in this kind of processes. We also test the matrices solution in \$h^0\to I_iI_j\$ and in the one-loop decays \$I_i\to I_j\gamma\$, and found that in the loop processes the virtual interactions of the exotic particles with leptons provide signals much larger than in the standard model.