

## Electromagnetic decays in Baryons

### Abstract content

The main objective of this research work is to study electromagnetic couplings of baryons in an extension of the quark model, the Unquenched Quark Model (UQM), where the contributions of the quark-antiquark pairs are taken into account. The interaction Hamiltonian is obtained from quantum field theory with in the non relativistic limit and includes electromagnetic transitions between quarks or between anti- quarks, plus creation and annihilation processes of quark-antiquark pairs. This is the first time the processes which do not conserve the number of the quarks and antiquarks has been taken into account in UQM.

### Summary

**Primary author(s) :** Mr. GARCÍA TECOCOATZI, Hugo (Instituto de Ciencias Nucleares UNAM)

**Co-author(s) :** Dr. BLIKER, Roelof (Instituto de Ciencias Nucleares, UNAM)

**Presenter(s) :** Mr. GARCÍA TECOCOATZI, Hugo (Instituto de Ciencias Nucleares UNAM)